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Developing Arabidopsis thaliana as a model for use in conservation genetics

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Developing *Arabidopsis thaliana* as a model for use in conservation genetics

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Abstract

Conservation genetics is the application of evolutionary and molecular genetics to the conservation of biodiversity. It can also be seen as a way to minimize the harmful effects of human activities by managing the evolutionary process and maintaining the adaptive potential of natural populations. In the past twenty years the field of molecular biology has advanced with leaps and bounds, providing the necessary tools for the use of genetics in conservation. *Arabidopsis thaliana* is a model organism that can help us understand how future plant populations will respond to environmental changes. The three studies presented here use *A. thaliana* as a model system to gain a more complete understanding of how early flowering can affect development; to gain insight into the traits that may indicate tolerance to water stress; and finally, to shed light on how hybridization and previous selection can affect a populations' adaptive potential. I found that early flowering does impact plant development. Plants that flowered earlier had a slower rate of leaf initiation, less leaves and smaller rosettes. I found that although the majority of plants produced less fruits in a water-limited environment, there were some individuals that produced a greater number of fruits under water stress. There is a strong selection to decrease the number of days to first flower in water-limited environments. I found that plants that had previously undergone a strong selection for early flowering were initially more tolerant to drought than unselected plants but the advantage was lost after three generations of a selection for drought tolerance. There was heterogeneity in the response to the selection amongst the hybrid populations. The information we gain by using *A. thaliana* can be extrapolated and applied to species that are threatened in order to better understand their evolutionary processes.

1. Introduction

Global changes, including climate change and extensive habitat fragmentation, mean that traditional conservation methods are no longer enough to ensure biodiversity will be preserved (Kramer & Havens 2009). Biodiversity is the term commonly used to describe all of the variety found on Earth. This includes species, ecosystems and the connections between them. One very important aspect to understand is how and if populations can adapt to these changing conditions. In order to do this it is necessary to focus on the ways genetics can aid in plant conservation. Genetics provides conservationists with a whole new set of tools to effectively manage critical species and areas. Although there have been many debates about the roles of genetics in extinction (Lande 1995; Spielman *et al*. 2004), there is a general consensus that conserving biodiversity ultimately depends on the conservation of genetic diversity. Here I attempt to articulate the current scope of conservation genetics; discuss the links between biodiversity, genetic diversity, and environmental change; and identify some of the challenges that need to be overcome in the discipline.

Conservation genetics is the application of evolutionary and molecular genetics to the conservation of biodiversity (Frankham *et al.* 2002). It can also be seen as a way to minimize the harmful effects of human activities by managing the evolutionary process and maintaining the adaptive potential of natural populations (Latta 2008). The idea of taking an evolutionary perspective to nature conservation has been around for decades (Frankel 1974; Soule & Wilcox 1980; Frankel & Soule 1981) following the advancement of the field of molecular biology which has provided the necessary tools for the use of genetics in conservation (DeSalle & Amato 2004). One of the most important uses of conservation genetics is using it to show a more complete picture of the patterns and processes of threatened species. In particular, the quantification of inbreeding depression, minimum viable population size and levels of genetic variation in natural populations provides measurements of processes that affect endangered populations, thus allowing for a more accurate understanding of the cause of decline (DeSalle & Amato 2004). Heritable genetic variation is a prerequisite for evolution. Consequently, the amount of genetic variation is a key issue in conservation. Populations may only persist if the rate of adaptive evolution at least matches the rate of environmental change (Burger & Lynch 1995).

Habitat fragmentation and climate change have both been targeted as major threats to biodiversity (Stockwell *et al*. 2003). The combination of the two can be detrimental to a population. In recent years there have been numerous studies on their impact on plant population viability and extinction risk (Walther *et al*. 2002; Aguilar *et al*. 2006; Lawson *et al*. 2008; Giam *et al*. 2010). Fragmentation affects species ability to cope with climate changes in two ways. First, in response to an environmental shift a population might migrate with the shift to a preferred environment (Davis & Shaw 2001) however, dispersal or translocation can be limited in a fragmented landscape (Groom & Schumaker 1993; Travis 2003; Thuiller *et al.* 2008). Second, it creates isolated populations with reduced genetic variation and increased inbreeding (Aguilar *et al*. 2008). Comprehensive studies (Reed 2005; Leimu *et al*. 2006) on population size and genetic variation imply there is a strong positive relationship between the two. The loss of genetic diversity within a population or species, defined as gene erosion, may reduce the fitness of small populations and eventually reduce the evolutionary potential of that species (Jump *et al*. 2009). Essentially, the lack of genetic variation decreases the ability of the species to adapt to the new environmental conditions.

If a population is unable to track its preferred environment it can cope with a restricted geographical range through phenotypic plasticity (DeWitt *et al*., 1998, Des Marais & Juenger 2010; Sultan 2000) or over many generations, evolutionary adaptation to the new local conditions (Davis *et al*. 2005; Orr & Unckless 2008). Phenotypic plasticity is the direct influence of the environment on the development of individual phenotypes (Bradshaw 1965; Stearns 1989). It is increasingly becoming a more important component of phenotypic change in the wild (Chevin *et al*. 2010) and it is well known that a wide diversity of organisms express phenotypic plasticity in response to biotic and abiotic factors in their environment. Lande (2009) modelled the evolution of plasticity following an environmental change beyond the range of usual fluctuations in the environment. He showed that with appreciable variation in plasticity, phenotypic adaptation involves the rapid increase of plasticity followed by slow genetic assimilation of the phenotypic change. Thus, the evolution of plasticity increases the rate of evolution to the new environment.

There are some challenges that need to be overcome in the field of conservation genetics. One major challenge is understanding how previous selective pressures affect the way populations interact and how that selection enhances or suppresses adaption. Another challenge that has not been well studied is understanding the implications of using genetics to aid fragmented wild populations (Frankham 2010). There are innumerable populations suffering from gene erosion but the practice of introducing genes from different populations to remedy this is controversial because of the threat of outbreeding depression (Pertoldi *et al*. 2007). Outbreeding depression refers to cases when gene flow between two populations results in offspring with traits that are not advantageous in either population therefore reducing the overall fitness (Frankham *et al*. 2002). In order to effectively use genetics as a management tool for conservation it is necessary to be able to predict the risk of outbreeding depression. Finally, what I will focus on throughout my dissertation is how having an understanding of how the genetics of a population changes as it adapts to novel environments and useful that knowledge can be to predict how different populations will respond to changes in the climate.

Arabidopsis thaliana is a model organism that can be used to test methods for using genetics in conservation. *Arabidopsis* is a genus in the family Brassicaceae. It has a fast life cycle, produces many progeny and can be easily grown in a greenhouse or indoor growth chamber. In addition, the genome of *Arabidopsis* is relatively small and can be manipulated quite easily (www.arabidopsis.org). Because of its ease of laboratory use, *Arabidopsis* can be used to address issues which have been discussed throughout this review such as outbreeding depression, inbreeding depression, minimum viable population size and plasticity. Below (Figure 1) is a schematic of the plant structure of *A. thaliana* that can be used as guide to the physical characteristics measured in the chapters of this dissertation.

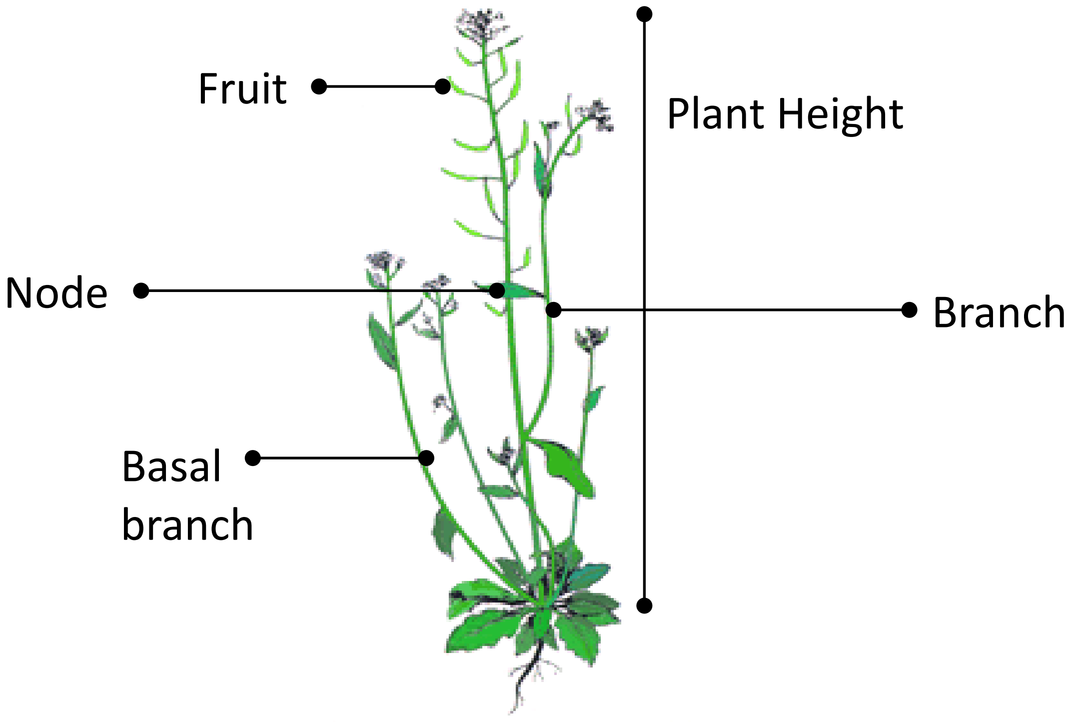

Figure 1. *A. thaliana* plant structure. Plant height is the height of the plant from the base to the top of the main stem. A basal branch is a secondary stem that grows from the base of the plant. A branch grows from the main stem and a node is where a leaf is growing from the main stem. The fruits are the long pods produced from the flowers containing the seeds.

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2. Developmental consequences of evolving to flower early

Abstract

Predicted changes in global climate have raised an interest in the mechanisms controlling adaptive evolution. Understanding how plant development might be altered due to adaptation to a new environment is important to conservation and agriculture. The objective of this study was to get a better understanding of how adaptive evolution affects the development of *Arabidopsis thaliana* by comparing the developmental strategy of plants that had been selected to flower early under two different growth conditions; spring-annual and winter-annual growth conditions with that of non-selected plants. I found that early-flowering plants had a slower rate of leaf initiation, less leaves and smaller rosettes; although the seed size did not differ between control plants and early-flowering plants.

2.1 Introduction

The transition from vegetative to reproductive development is a major phase change in the life cycle of annual plants that is controlled by both endogenous and environmental factors (Srikanth & Schmid 2011; Richards *et al*. 2012). The temporal control of flower initiation is important in natural and agricultural environments as it ensures the plant completes flower development, pollination, and seed production in a favourable environment (Visser & Holleman 2001; Shindo *et al*. 2005; Quilot-Turion *et al*. 2013). In annual plants, the transition to the reproductive stage usually marks the termination of vegetative growth, and thus a correlation between vegetative growth and flowering time is commonly observed size (Koornneef 1991; Diggle 1999; Steynen 2001) . The smaller vegetative size is expected to result in fewer resources and less photosynthetic material available for use during the reproductive phase (Smith & Fretwell 1974; Earley *et al*. 2009; Méndez-Vigo *et al*. 2010). There is a general trend of advanced flowering time in many species in response to climate warming (Fitter & Fitter 2002; Parmesan 2006). Thus, there is concern that the acceleration in phenology caused by changes in climate could reduce fitness and yield (Craufurd & Wheeler 2009; Srikanth & Schmid 2011). However, little is known about the ways in which plant development is affected by changes in flowering time. It is important to understand the genetic relationship between flowering time and vegetative growth to determine whether these two traits can be optimized independently.

Although vegetative size and time to reproduction are closely associated, this relationship is not perfect (Mendez-Vigo 2010), and the degree of genetic interdependence between these two traits remains unclear. Vegetative size in annual plants is a function of the rate of leaf initiation, leaf size and the time spent in the vegetative phase. Thus, the temporal control of flowering initiation also determines the time spent in the vegetative phase. If the timing of transition is independent of the development rate, earlier transition can potentially constrain plant size and the vegetative resources available for reproduction (as predicted by life-history theory (Stearns 1992). However, there is some evidence that genes that affect flowering time also affect the rate of leaf production in *Arabidopsis*, maize and rice (Itoh *et al*. 1998; Veit *et al*. 1998; Wang *et al*. 2008), decoupling flowering time from vegetative size.

Arabidopsis thaliana is an ideal annual plant in which to investigate the correlation between flowering time, leaf size and leaf number because extensive natural variation for these developmental traits has been observed (Koornneef *et al*. 2004; Alonso-Blanco *et al*. 2009). In this species, vegetative growth occurs in a rosette until transition to reproduction occurs, and an inflorescence expands vertically. Among natural accessions early flowering is correlated with a smaller number of leaves in the rosette (Steynen *et al*. 2001). This supports the hypothesis that genes that affect flowering time do not affect development rate, and therefore earlier flowering time stops vegetative development earlier, when less leaves have been produced. On the other hand, genes that affect both flowering time and leaf initiation rate (Wang *et al*. 2008; Méndez-Vigo *et al*. 2010; Koornneef *et al*. 1995), or flowering time and leaf size (Willmann & Poethig 2011) have been identified . For example, over expression the micro RNA *miR156* that targets *SPL* transcription factors causes a delay in flowering transition, and a decrease in leaf rate production (Wang *et al.* 2008). A compensating mechanism has been proposed among duration of vegetative time, rate of leaf production and leaf size, such that the actual vegetative biomass stays relatively constant, although its distribution over time and across leaves may vary (Wang *et al.* 2008). Studies on the natural genetic variation in flowering time and its correlated effects on vegetative development are limited in *A. thaliana*, but 10 quantitative trail loci (QTL) have been identified to affect rate of leaf production in a set of recombinant inbred lines derived from a cross between accessions Fei-0 and Ler (Méndez-Vigo *et al*. 2010); confirming the complex nature of this trait. Most of these QTL co-locate with QTL for flowering time, suggesting some of the natural alleles do have pleiotropic effects on vegetative development. However, due to inherent limitations in QTL analysis it is not possible to rule out the existence of independent genes in close proximity.

Here, we use an experimental evolution approach to address the genetic correlated effects of early flowering on vegetative development in *A. thaliana*. We investigate the relationship between the genetic pathways that control the reproductive switch and vegetative growth by comparing the vegetative development of experimental lines selected to flower earlier with that of non-selected plants (Scarcelli *et al.* 2007; Scarcelli & Kover 2009). Selection should have changed only the allele frequencies of genes involved in determining the timing of the switch. Thus, any correlated responses to selection on development would indicate pleiotropy. Contrary to expectation, we have found that lines selected to flower early did not produce significantly less fruits than control lines (Kover *et al.* 2009). It is possible that no effects on fitness were observed because early flowering plants also evolve accelerated vegetative development or made bigger leaves. Alternatively, selected lines might have produced the same number of fruits despite smaller vegetative size, but less seeds per fruit or smaller seeds. Here, we will specifically address how selection for early flowering affect the rate of leaf initiation, rosette size and seed production. Understanding the developmental consequences will shed light on possible shared pathways that regulate flowering transition and vegetative development, and the existence of unavoidable correlated responses to early flowering.

2.2 Methods

We used selfed seeds from experimental lines selected for early flowering (3 lines selected to flower early in spring annual growth conditions and 3 lines selected to flower early in winter annual conditions), which were previously described in Scarcelli *et al*. (2007) and Kover *et al*. (2009). Both control and selected lines were derived from an outbred population created by randomly mating 19 accessions of *A. thaliana*. From each section line we grew seeds collected from the 43 earliest flowering plants after six generations of selection. In addition, plants from 43 randomly selected plants from 3 control lines from the spring annual growth conditions were grown. Approximately five seeds from each plant were planted into 43 pots (5.5cm diameter) filled with F_2S: Seed & Modular + Sand soil (Levington). Thus, a total of 396 plants were grown; 132 plants selected for early flowering under spring-annual growth conditions, 132 plants selected for early flowering under winter-annual growth conditions and 132 control plants. These were randomly distributed over 16 trays and stratified in the dark at 4ºC for 3 days prior to being moved into a growth chamber (Arabidopsis Series, Percival Scientific) set at 21°C during the day/18°C at night with 16 hours of light per day, an environment which had not been experienced by any of the lines for the last 6 generations.

The germination date of the first seedling was recorded, and any subsequent seedlings were removed. Seeds in one pot from the control line, and two pots in the early flowering winter-annual line did not germinate, and were removed from further analysis. Plants were inspected two/three times a week and the number of leaves per plant each time was recorded. The day when floral buds were first observed (bolting) was recorded, and at this time the final number of leaves at flowering and two measurements of rosette diameter were performed. Bolting was used as a marker for the transition between vegetative and reproductive growth (from here on referred to as flowering). Some control plants (n=17) did not bolt within the two months of the experiment. For these plants, bolting was estimated as being one to five days beyond the 60 days monitored. With the extra days assigned at random to each plant to ensure the data were not biased. These plants also had the number of leaves counted and rosette diameter measurements recorded at the end of the experiment, and these were used to represent number of leaves and rosette diameter at time of flowering.

Days to flowering was calculated as the number of days between germination and bolting. Rosette diameter was calculated as the average of two rosette diameter measurements taken at 90 degree angles.

To compare the development rate of plants from selected and control lines we selected two dates from the vegetative growth period, the “seedling stage”, when seedlings were 10 days after germination, and the “pre-bolting” (17 days after germination, which corresponds to one day before any plant has flowered). Rate of leaf initiation was calculated for both of these dates, as well as on the day of flowering by taking the total number of leaves on the day of interest divided by the number of days since germination for each plant.

We had determined that early flowering plants did not produce significantly less fruit. To determine if early flowering affected seed quality, we collected 3 fruits from each plant, opened and photographed them. Number of seeds/ fruit were counted using ImageJ imaging software (Rasband n.d.). Afterwards, the seeds from three fruits from each plant were weighed using a Mettler UMT2 Ultra Microbalance, and the average seed size was calculated by dividing the total weight by the number of seeds present in the sample.

The data were analysed using a nested ANOVA with lines nested within selection treatment (spring, winter, control) to determine the effect of selection for early flowering on rosette size, rate of leaf initiation at two time points of development, number of total leaves, and number of seeds per fruit and seed weight. A least square means test was used *post hoc* to determine which groups were different from which. All statistical analysis was conducted using the statistical analysis computer package PASW Statistics (SPSS) 20 for Windows.

2.3 Results

Flowering time

Although plants were grown in a less complex environment than the environment they were selected in, selected lines still flowered significantly earlier than control lines (Figure 1; Table 1).

Vegetative development: rate of leaf initiation and rosette diameter

Leaf initiation rate varies during the development, with an initial phase of slow development followed by a faster rate until it stops when flowering occurs (Figure 2). At the seedling stage the lines selected for early flowering in spring annual conditions had a significantly faster rate of leaf initiation than the lines selected to flower in winter annual conditions and the control lines (Table 1; Figure 3).There was no significant difference in rate of leaf initiation between the lines selected for early flowering in winter annual conditions and the control lines. This result suggests that the genes that cause earlier flowering under the spring treatment also accelerates the plastochron, while flowering genes selected in the winter did not have the same effect.

A significant difference in rate of leaf initiation was also present at the pre-bolting stage (Table 1; Figure 3). At this developmental stage, all three plant lines had significantly different rates of leaf initiation (Tukey, $p < 0.05$). The lines selected for early flowering in spring had the slowest rate while the control lines grew new leaves the fastest. Although lines selected to flower earlier show an accelerated rate of leaf production early in development, this increase did not fully compensate for the earlier reproductive transition, and lines selected to flower early under both spring and winter had significantly less total leaves than the control lines at flowering time (Table 1, Figure 4). The lines selected for early flowering in the spring had a significantly smaller total leaf number than the lines selected to flower early in winter annual conditions (Tukey, $p<0.05$). Furthermore, the lines selected to flower early in the spring had a significantly smaller rosette than the lines selected to flower early in winter conditions and the control plants (Table 1; Figure 5). The lines selected for early flowering in the winter had smaller rosettes than the control plants but the difference was not statistically significant.

Seed size

Contrary to expectations, spring-selected lines produced more seeds per fruit and seeds larger than control lines, even though they flower at a significantly smaller size (Figure 6). However, these differences were not significantly different (Table 1).

2.4 Discussion

Understanding how earlier flowering can impact plant development is important. Adequate development ensures that the plant will be capable of a high fitness. Plant productivity is essential information for agriculture and conservation. Despite the many studies on the advance of flowering time, little is known how plant development is affected by changes in flowering time. This study has looked in depth at how plant development varies between individuals that have been selected for early flowering in two different growth environments and those that have had not experienced selection.

Selection for early flowering results in plants that have an increased rate of leaf development in the initial stages of growth but have a slower rate of leaf production at time of flowering. This early growth rate increase does not lead to a larger rosette. Plants that flower earlier have a smaller rosette and less leaves at flowering than plants that flower later. Despite having a smaller vegetative size, plants that flower early do not have fewer or smaller seeds than late flowering plants.

It is clear from our study that selection for early flowering can also affect the plastochron in both juvenile and mature stages. The genes controlling flowering time are also playing a role in the final rosette size at the switch from the vegetative phase to the reproductive phase in the life cycle as the plants selected to flower early in the spring had a smaller rosette. Even though the early flowering plant is increasing the rate of leaf initiation to accommodate for less time spent in the vegetative stage, it is not able to produce a rosette of similar size to the later flowering control plants. The differences in flowering time and in vegetative size had no effect on the plants ability to produce seeds indicating that early flowering does not necessarily equate to lower fitness.

It is possible that the conditions in which the plants were grown (a simulation of constant summer conditions), which had not previously been experienced by any of the lines and was different from those in which they were artificially selected, could be partly responsible for the difference in developmental strategy. The early flowering winter-annual plants may have adapted differently to this environment, having only previously experienced a simulation of winter-annual growth conditions, which is vastly different from the conditions they were grown under in this experiment. Both early flowering spring-annual and control lines had previously been selected for and grown in much more similar conditions. A change in environment can mean that phenotypic plasticity can cause variation in various plant traits, including development. However, previous findings by Kover *et al*. (2009) showed that growing either of the early flowering lines in the opposite growth condition (i.e. early flowering spring-annuals under winter conditions and vice versa) still causes plants to flower significantly earlier than controls. This would suggest that the difference in developmental strategy between the two early flowering lines is probably not due to environmental variation. Instead this is most likely to be because of the difference in genetic control of flowering initiation caused by artificial selection.

It is well documented that many plants have experienced changes in phenological timing due to warmer temperatures, with many plant species flowering earlier (Fitter & Fitter 2002; Root *et al*. 2003; Parmesan 2006).This can be of concern to the success of populations of annual plants, because life-history trade-offs suggest that earlier transition to reproduction in annuals can cause reduction in reproductive output (Shitaka & Hirose 1998). It has also been shown in animals that increases in temperatures are causing a decline in body size affecting their metabolic (Atkinson & Sibly 1997; Gardner *et al*. 2011). It is possible that both plants and animals are adapting to changing climates by shifting their developmental strategy to transition to the reproductive stage at a smaller size. These findings suggest that increases in temperature can lead in general to reductions in organismal size, and that this response can potentially affect an organism's fitness and its relationship with other species. However, although we found that plant lines selected to flower early under spring and winter conditions had a lower final leaf count, a previous study by Kover *et al.* (2009) reported no significant difference in the number of fruits produced between early flowering plants and control plants. In this study, we looked for differences in number of seeds per fruit and seed size, but also did not find any significant differences. The early flowering spring plants still produced the same number of seeds even though they had 70% less leaves and 40% smaller rosettes than the control. It can be hypothesised that plants with smaller rosettes and fewer leaves need less resources to maintain their vegetative material resulting in more resources available for seed production and even though the control lines are much larger, the extra resources accumulated from having more leaves are being used for plant maintenance and not seed production. Another possibility is that *Arabidopsis* inflorescences do contribute significantly to photosynthesis (Earley et al. 2009), relaxing the vegetative size by reproductive output trade-off.

2.5 Figures and Tables

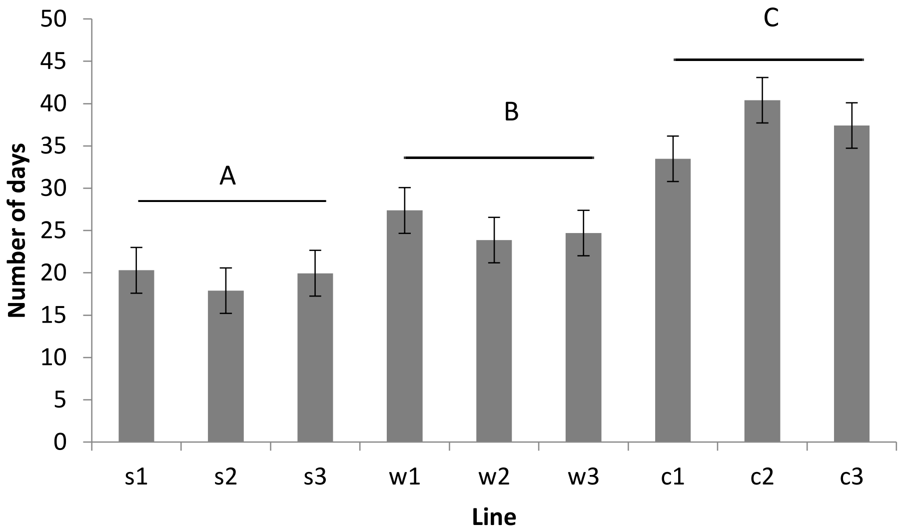


Figure 1. Average number of days to flower for each of the plant lines; s1, s2, s3 are lines selected to flower early in spring. w1, w2, w3 are lines selected to flower early in winter, c1, c2, c3 are control lines maintained in the spring conditions simultaneously with spring selected lines. Letters indicate groups that are significantly different based on Tukey's post hoc test ($p < 0.05$).

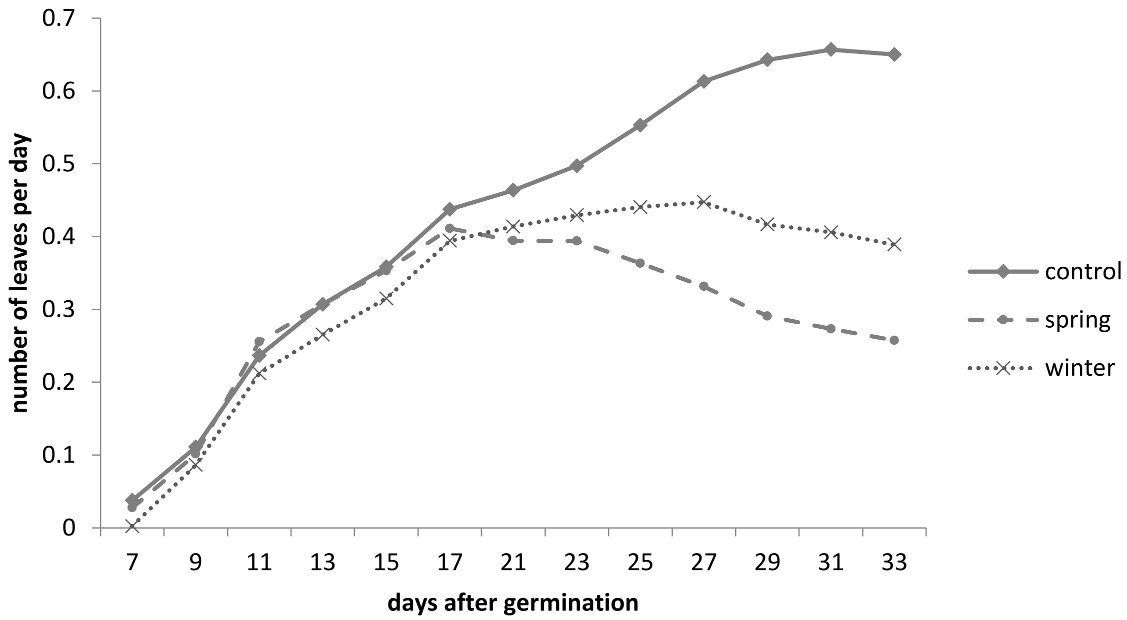


Figure 2. Rate of leaf initiation in the three plant lines- control, early flowering in spring growth conditions and early flowering in winter growth conditions. Rate of leaf initiation was calculated by dividing the number of leaves by the number days since germination.

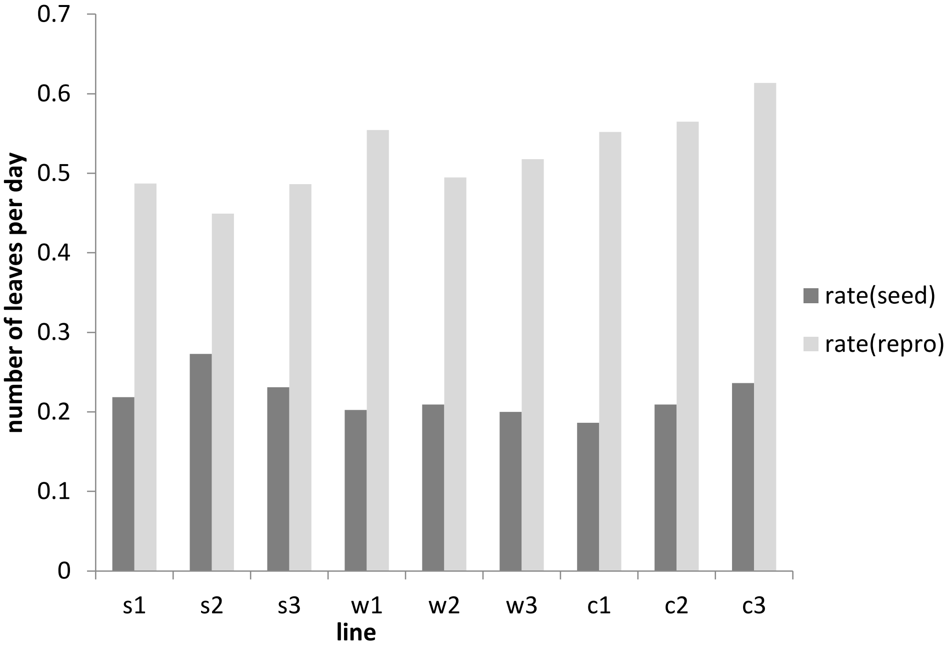


Figure 3. Rate of leaf initiation per line at the seedling stage (dark grey bars) and at the reproductive stage (light grey bars). s= plants selected to flower early in spring, w= plants selected to flower early in winter, c= control plants with no selection.

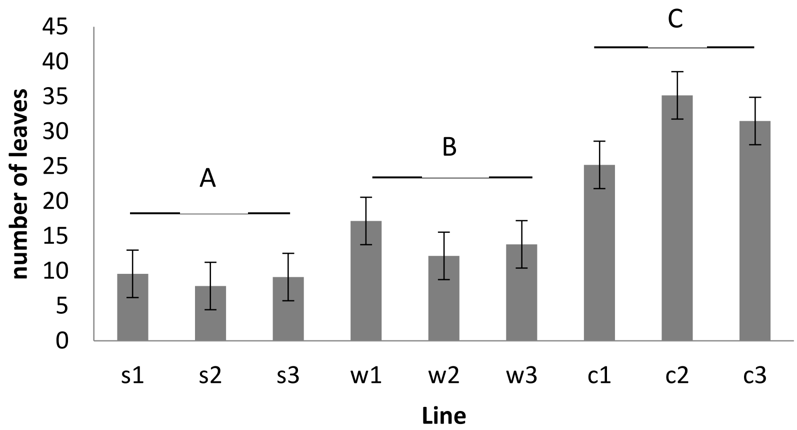


Figure 4. Number of leaves: total leaf number. s= selected to flower early in spring, w= selected to flower early in winter, c= control. Letters indicate groups that are significantly different based on Tukey's post hoc test ($p < 0.05$).

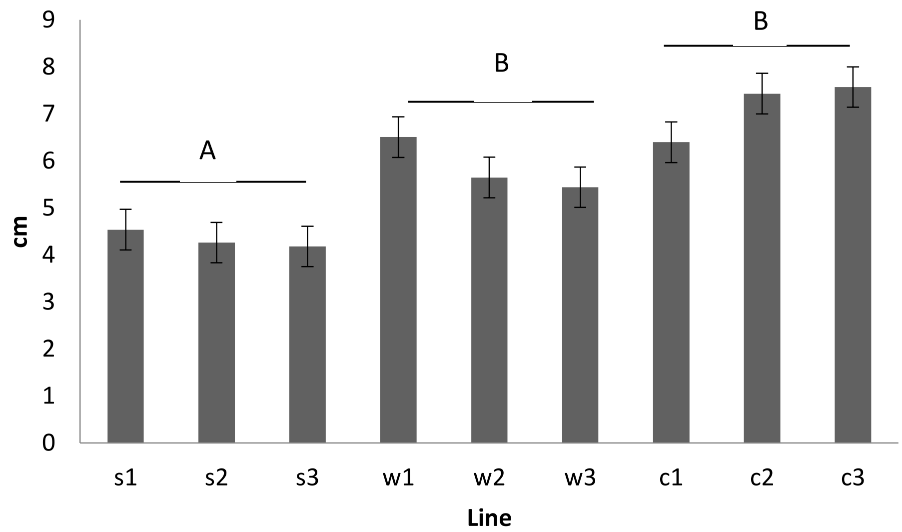
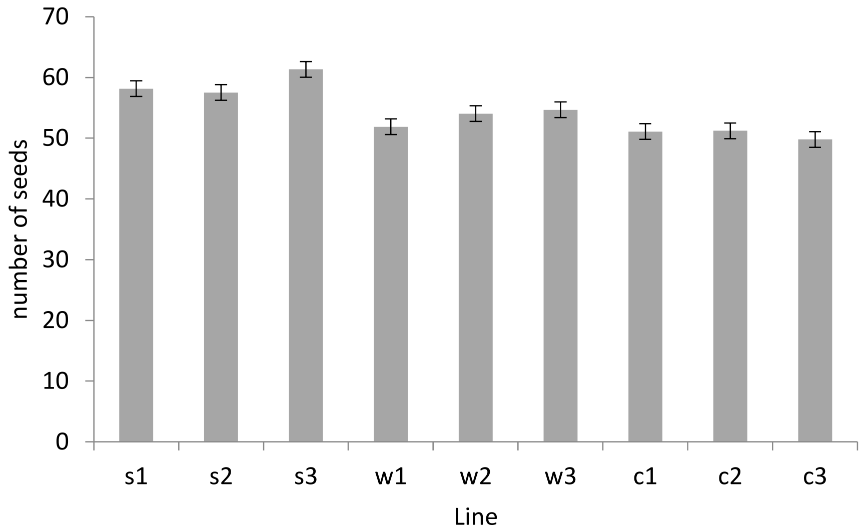


Figure 5. Rosette size; s= selected to flower early in spring, w= selected to flower early in winter, c= control. Letters indicate groups that are significantly different based on Tukey's post hoc test ($p < 0.05$).

A



B

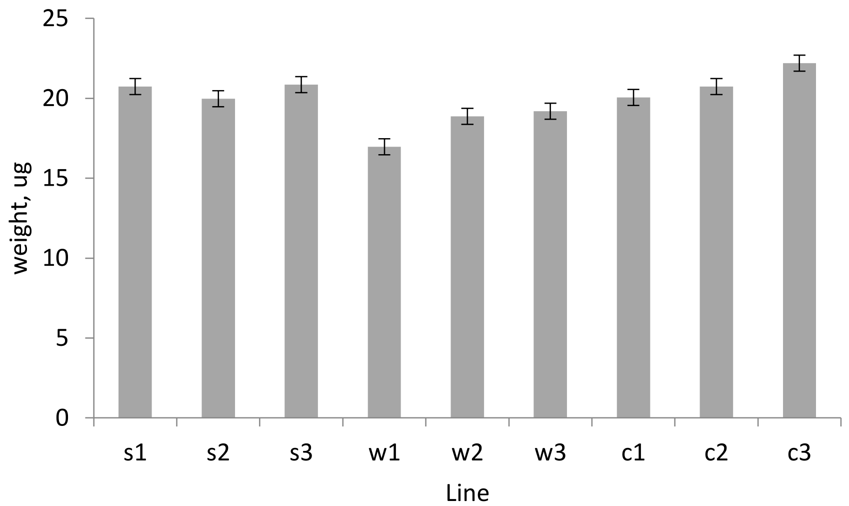


Figure 6. A) Seed number B) Seed weight. s= selected to flower early in spring, w= selected to flower early in winter, c= control.

Table 1. Results for ANOVA with line nested within treatment. Degrees of freedom reported are the numerator. The denominator degrees of freedom for all tests is 393.

		df	MS	F	P
Flowering time	Treatment	2	5155.2	46.74	0.00
	Line	6	125.0	1.13	0.342
	Error	384	110.3		
Rosette diameter	Treatment	2	241.873	83.88	0.00
	Line	6	10.240	3.5	0.258
	Error	384	2.884		
Rate of leaf initiation (seedling stage)	Treatment	2	507.37	9.92	0.00
	Line	6	212.24	4.15	0.092
	Error	384	51.17		
Rate of leaf initiation (reproductive stage)	Treatment	2	361.45	32.49	0.00
	Line	6	36.07	3.24	0.079
	Error	384	111.2		
Total leaf number	Treatment	2	15218.4	152.50	0.00
	Line	6	418.1	4.19	0.087
	Error	384	99.8		
Seed number	Treatment	2	4653.0	2.67	0.071
	Line	6	1003.0	0.57	0.750
	Error	384	1744.0		
Seed weight	Treatment	2	148.55	9.65	0.089
	Line	6	26.47	1.72	0.116
	Error	384	15.36		

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3. Selection for tolerance to water-limited conditions

Abstract

The potential of organisms to adapt to changes in the environment will determine whether or not it will persist in the natural world. There is global concern that changes in current climate will lead to extinction and consequently a loss in the biodiversity of the planet. It is necessary to improve our understanding of how plant communities will respond to more drastic drought events and what plant traits may indicate a tolerance to water stress. In this study we found that although the majority of plants produced less fruits in a water-limited environment, there were some individuals that produced a greater number of fruits under water stress. There is a strong selection to decrease the number of days to first flower in water-limited environments. Understanding how a population responds to water limitation is important as the global climate changes and the risk of extreme droughts increases. It can allow us to better manage biodiversity and how global biodiversity may shift in response to environmental changes.

3.1 Introduction

Nature is constantly dealing with environmental heterogeneity and organisms need to cope with such variation in order to survive. If there is suitable heritable variation within a population, selection will begin to favour individuals that are capable of surviving in the new environment. The potential of organisms to adapt to changes in the environment will determine whether or not it will persist in the natural world. There is global concern that changes in current climate will lead to extinction and consequently a loss in the biodiversity of the planet.

According to climate models (IPCC 2007) substantial changes in annual precipitation are predicted. Current climate models suggest that not only are there going to be substantial changes in annual precipitation, with some areas having an increase in precipitation and others having a decrease, a change in the magnitude of these wet and dry events is suggested to increase (see Figure 1). The occurrence of extreme events, both rainfall and drought, is expected to increase. The increase in the magnitude of extreme weather events can potentially have a large impact on the genetic makeup of our current ecosystems. It may reduce the amount of genetic variation and potentially render more species extinct if populations are unable to adapt to and maintain fitness in areas that are affected by changes in precipitation. In this study we focus on the effect of water stress on the genetic makeup of plant populations.

Previous studies have shown that a rise in global temperatures can result in a decrease in species diversity (Botkin *et al*. 2007; Bellard *et al*. 2012), a decrease in population size (Kim & Donohue 2013), a change in species distribution (Bakkenes *et al*. 2006), and a decrease in yield (Teixeira *et al*. 2013; Cherwin & Knapp 2012). It is important for both conservation and agricultural food production that we understand the implications of global changes. The introduction of genetically-modified crops is increasing (Jacobsen *et al*. 2013) and in order to use these crops most efficiently it is essential to know which traits indicate tolerance to a reduction in water availability.

When responding to changes in environment, plants have only a few options- acclimate, adapt, move or die. If a plant does nothing it may end in death and subsequently extinction. A short term response to a change in the local environment is for a plant to express an alternate phenotype. The ability of a genotype to express different phenotypes is called phenotypic plasticity. This is a change in the gene expression only without a modification of the DNA. Over a longer period of time plants can evolve and adapt to the new environment through a change in genotype or they can migrate in a favourable direction resulting ultimately in a range shift. Palaeoecological studies show that plant movement has occurred over geological timescales in response to climate change (Pardi & Smith 2012) but it not clear whether plants are capable of keeping up with the predicted velocity of future climate changes (Corlett & Westcott 2013). Adaptation is possible if there is sufficient genetic variation and some individuals in the population exhibit a tolerance to the new environment.

Genetic variation within a population is important when considering plant responses to environmental changes as an individual’s ability to adapt can be limited by the amount of variation. If there is not sufficient genetic variation the population may not be capable of responding to global environmental changes.

Plants respond to stress from limited in water in many ways. In an effort to conserve water and prevent water loss, plants reduce the time their stomata are open. This leads to less photosynthesis which then potentially impacts the growth of the plant. It has been shown that in general plants will respond to limited water by reducing their final height, and producing less fruits (Hampe 2005; Montesinos *et al*. 2010; Anjum *et al*. 2011).

The model plant *Arabidopsis thaliana* (Hoffmann 2002; 2005) offers an opportunity to explore natural variation in responses to drought stress (Bouchabke *et al*. 2008; Des Marais *et al*. 2012). Recently, new *A. thaliana* inbred lines, called Multiparent Advanced Genetic InterCross (MAGIC) lines, have been developed (Kover *et al.* 2009). These genetically diverse and highly recombinant inbred lines were derived from intercrossing 19 parental accessions for four generations. The parent lines were selected either because of their geographical dispersion or for being commonly used. Using MAGIC lines allows us to look at the plastic response and understand the genetic basis of the traits that indicate tolerance to water-stress.

It is necessary to improve our understanding of how plant communities will respond to more drastic drought events and what plant traits may indicate a tolerance to water stress. In this study we aim to answer the following questions: 1) what is the likely effect of an increase in water stress events on the genetic structure of plant populations? ; 2) Is there sufficient genetic variation to respond to environmental change? ; and 3) which phenological traits indicate a tolerance to water stress?

3.2 Methods

Plant Material and Growth Conditions

This study was performed using seeds of the seventh inbred generation (S7) of 400 Multiparent Advanced Generation Inter-Cross (MAGIC) lines of *Arabidopsis thaliana*. Additional details about these lines (i.e. how these recombinant inbred lines were generated) are found in Kover *et al.* (2009). The genomic information of the 19 founder accessions (i.e. the parental lines) are described in Gan *et al.* (2011).

Three replicates of each of the 400 MAGIC lines were grown for a total of 1200 control plant and 1200 water-limited plants. Seeds from each genotype were directly sown at the soil surface in 2.5cm pots filled with F2 + Sand substrate (Levington® Seed and Modular Compost, The Scotts Company, UK). Twenty-four of these pots were randomly placed in each of the 100 trays. To avoid position effects, trays were rotated around the greenhouse weekly. On the same day when all pots were watered to induce germination, chloronicotinyl insecticide (Intercept® 70WG, The Scotts Company, UK) was applied at 0.2 g product per litre of water. After seeds had germinated and cotyledons were expanded, a single seedling was kept in each pot and allowed to grow in greenhouse conditions (24 ± 5ºC; 16-h-light/8-h-dark photoperiods).

Plants were either well-watered (i.e. control group; 1,200 plants) or water-limited (i.e. under drought stress; 1,200 plants). All plants were kept well-watered by bottom watering during the whole pre-treatment period. For the drought stress treatment, 14-day-old plants were not watered for 11 days at which point roughly 80% of the plants showed symptoms of wilting. At the end of day 11, pots were re-watered and kept well-watered by sub-irrigation till the harvest. For the control group, water was applied three or four times per week so that the soil surface of each pot was continuously damp and plants did not wilt.

In order to keep all plants mildew free, plants were treated by foliage spray with myclobutanil when they were 13 days old (Fungus Fighter Disease Control, Bayer CropScience, UK), a systemic fungicide, at 20 ml product per litre of water. This was sprayed lightly onto the leaves and was not considered to contribute an amount of water that would impact the drought treatment.

Measurements

Plants were monitored daily and the germination date, as well as the date when the flowering buds and open flowers were first noticed was recorded. Bolting time was calculated as the numbers of days between germination and the day the first flower bud was noticeable. Flowering development was determined as the number of days between bolting and the first open flower bud. Days to wilting were the number of days between the last water supply and the first visible signs of leaf wilting, namely leaves became limp, drooping, and/or curled.

The following traits were collected at the harvest time for both treatment groups: plant height; number of basal branches; number of branches; number of nodes; and total number of fruits (siliques).

Data analysis

Regression based analysis was used to estimate the strength and direction of selection coefficients (β) as described in Lande & Arnold (1983) and Stinchcombe *et al* (2008). The regression analysis performed takes into account the relationship between the dependent and independent variables (i.e. relative fitness (w) and traits (z) using the following formula: s = Covariance(w,z). All statistical analysis was conducted using the statistical analysis computer package PASW Statistics (SPSS) 20 for Windows.

3.3 Results

Phenotypic traits

The plants in the water-limited treatment had significantly less fruits (Figure 2, Tables 1 and 2), and were significantly shorter in height (Figure 3, Tables 1 and 2) than the control plants. The water-limited plants had significantly more nodes per plant (Figure 4, Tables 1 and 2) than the control plants but in contrast had significantly fewer basal branches (Figure 5, Tables 1 and 2) than the control plants. There was no significant difference between the number of branches off the main stem of the plants in the water-limited treatment and those in the control treatment (Figure 6, Tables 1 and 2). There was no significant difference in the number of days to first flower between the water stressed plants and the control plants (Figure 7, Tables 1 and 2).

Genetic variation

This experiment shows that there is natural genetic variation (Figure 8). The red line represents a 1:1 ratio if fitness was equal in both the control and the water limited environment. The lines above or to the left of the red line are the lines that have a higher fitness in the environment with less water. Although the majority of the MAGIC lines have less fruits (i.e lower fitness) in the water limited environment, there are some lines that have a higher fitness in the water limited environment than in the control.

Selection analysis

Regression analysis was used to estimate the strength and direction of selection in this study (Lande & Arnold 1983; Stinchcombe *et al.* 2008). The linear regression coefficient, β, describes the average slope of the individual selection surface. The quadratic selection coefficient, γ, describes the curvature of the selection. The value of β along with the differences in β between the control environment and the water limited environment are used to determine which traits are important and which trait is selected for.

Our results show that basal branches is an important trait since it has the highest β value in both environments (Table 3). Number of days to first flower is strongly selected for as it has the greatest difference between β in the control and the water limited environment (Table 3). In the water limited environment there is a strong correlation between day of first flower and height, branch number and node number (Table 4). In the control, there is the same correlation but it is weaker with height and node (Table 5).

3.4 Discussion

Scientists have been linking the relationship between the physical properties of plants and the physical environment for decades. Today it is important to use this information in a new way to understand and predict how future species distribution will differ under different environmental regimes. The global climate is changing and it is essential that we attempt to understand which species naturally have enough variation to succeed in a novel, and often stressful, environment.

Arabidopsis thaliana has a wide geographical range (Hoffman 2002), spread over a variety of climatic regions (Alsono- Blanco *et al.,* 2009, Verslues and Juenger, 2011). This offers us a good opportunity to investigate natural variation in fitness in response to drought stress. However, it can be difficult to generate experimental populations to make use of this natural variation. The creation of the MAGIC lines (Kover *et al*., 2009) captures this natural genetic diversity and allows us to evaluate the success of *A. thaliana* during a drought. This knowledge can then be extrapolated and applied to both economically important species for use in agriculture and those important in conservation.

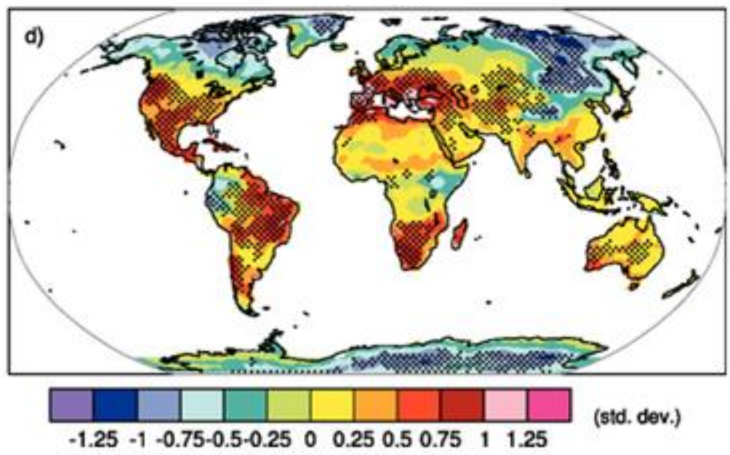
The *A. thaliana* lines in the water limited environment showed differing responses to the cessation of water. As expected the overall number of fruits produced in the plants experiencing the water stress was lower and the plants were shorter but there were some individuals that exhibited high fruit number despite the lack of water. This suggests that although an extreme drought event would significantly decrease fitness in the majority of the population there are plant lines that will thrive in such conditions. We have shown that in *Arabidopsis thaliana* there is sufficient standing genetic variation to respond to environmental change. In the event of a change to an environment with less water availability, there are some plants that would be more fit (i.e. produce more fruits). The genetic structure of the resulting population would change to represent the individuals capable of high fruit production despite the reduction in water. This highlights the importance of maintenance and conservation of diverse populations globally across all plant groups. The MAGIC lines used in this study represent the natural variation found in *Arabidopsis* and therefore this can be translated to other species.

There is a strong selection for decreasing the number of days to first flowering. In drought conditions we expect to see plants which flower earlier and exhibit significant changes in relative fitness. This aligns with the theory of 'drought escape' which occurs when plants flower earlier during water stress. Flowering earlier allows the plant to still produce at least some fruits before it becomes unable to due to lack of water.

Understanding how a population responds to water limitation is important as the global climate changes and the risk of extreme droughts increases. It can allow us to better manage biodiversity and how global biodiversity may shift in response to environmental changes. In addition, this information can be very useful for agriculture as we look for species that are better adapted to coping with periods of water limitation. On a wider outlook, this is a contribution to understanding how future ecosystems will respond to extreme environments, especially as we face unprecedented changes in global climate.

3.5 Figures and Tables

A)



B)

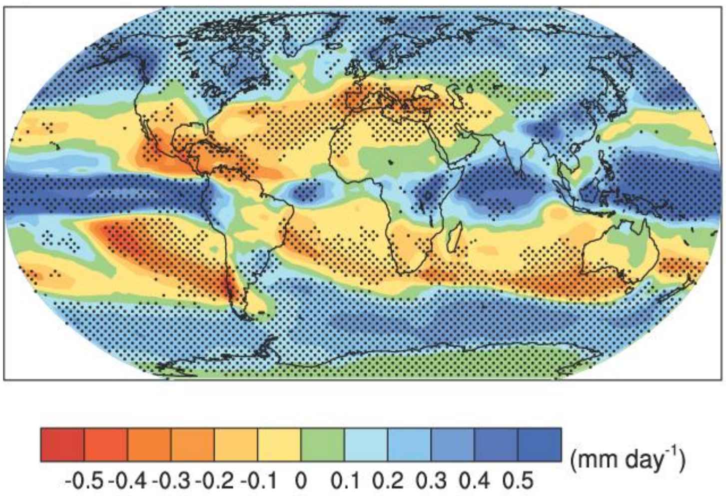


Figure 1.A) Global changes in spatial patterns of dry days. Changes between two 20-year means (2080-2099 minus 1980-1999) for the SRES A1B scenario. Adapted from IPCC (2007, p.785).
B) Global mean changes in precipitation (mm day-1). Changes are annual means for the SRES A1B scenario for the period 2080 to 2099 relative to 1980 to 1999. Adapted from IPCC (2007, p.769).

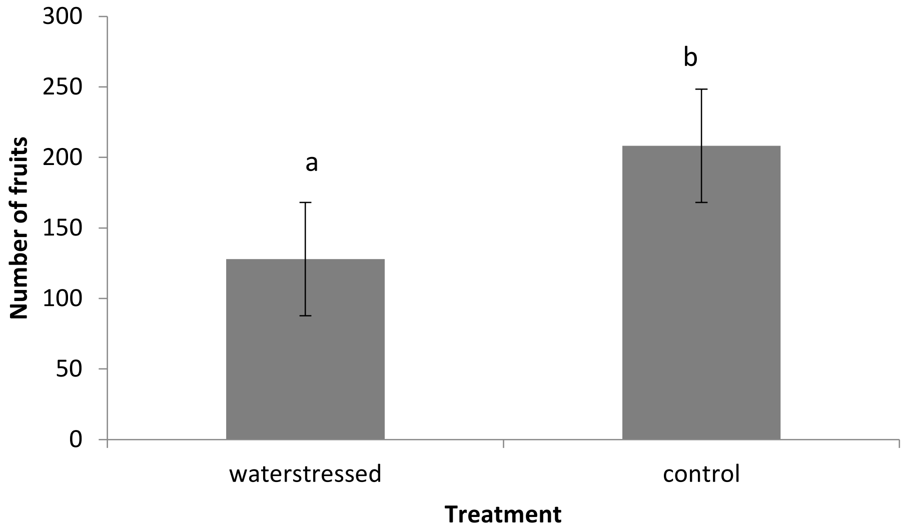


Figure 2. Average number of fruits per plant in the two treatments: water limited and control. Letters indicate groups that are significantly different based on ANOVA; $p < 0.05$ ($df = 1$, $F = 1121.5$). Errors bars represent standard deviation.

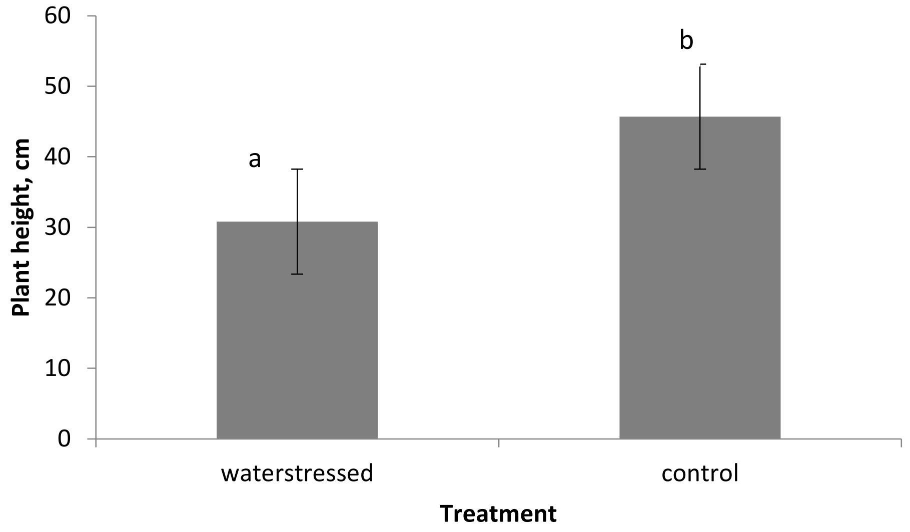


Figure 3. Average plant height in the two treatments: water limited and control. Letters indicate groups that are significantly different based on ANOVA; $p < 0.05$ (df= 1, F= 1661.5). Errors bars represent standard deviation.

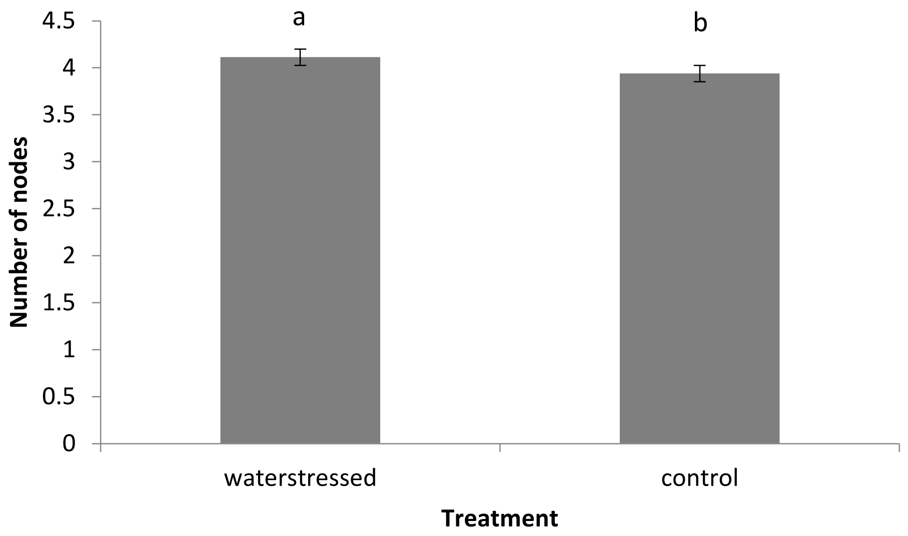


Figure 4. Average number of nodes per plant in the two treatments: water limited and control. Letters indicate groups that are significantly different based on ANOVA; $p < 0.05$ (df= 1, F= 7.5). Errors bars represent standard deviation.

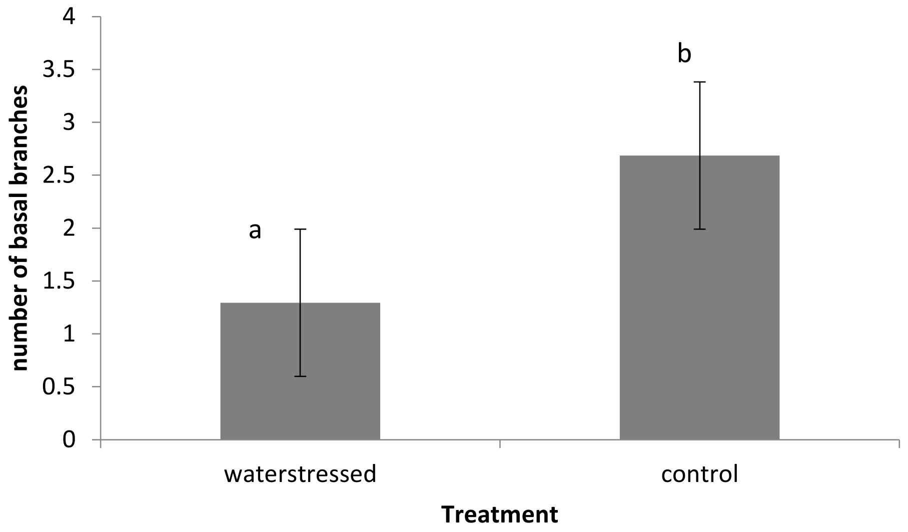


Figure 5. Average number of basal branches on each plant in the two treatments: water limited and control. Letters indicate groups that are significantly different based on ANOVA; $p < 0.05$ (df= 1, F= 539). Errors bars represent standard deviation.

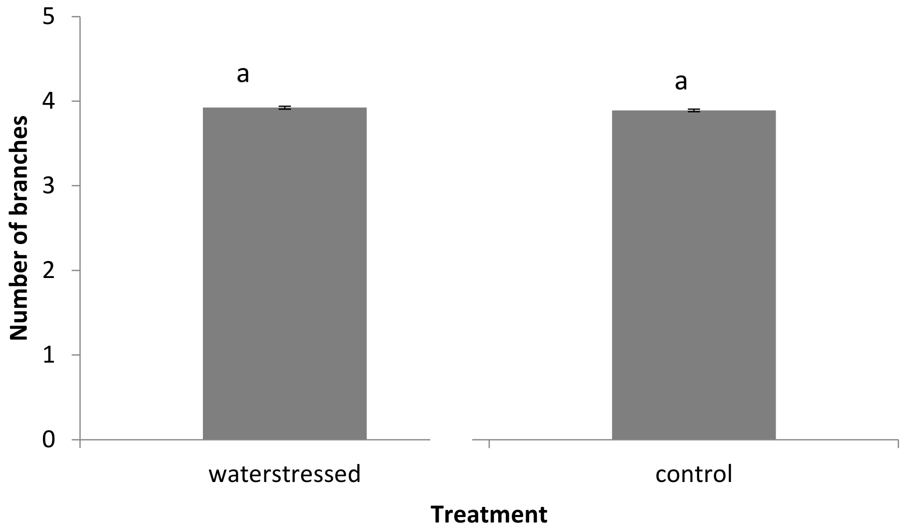


Figure 6. Average number of branches on plants in the two treatments: water limited and control. Letters indicate groups that are significantly different based on ANOVA; $p < 0.05$ (df= 1, F= 0.297). Errors bars represent standard deviation.

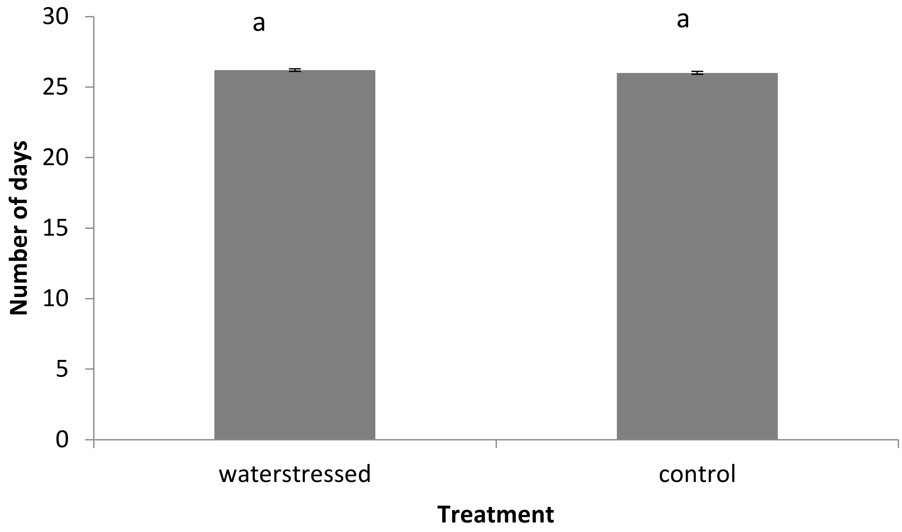


Figure 7. Average number of days to first flower. Letters indicate groups that are significantly different based on ANOVA; $p < 0.05$ (df= 1, F= 2.64). Errors bars represent standard deviation.

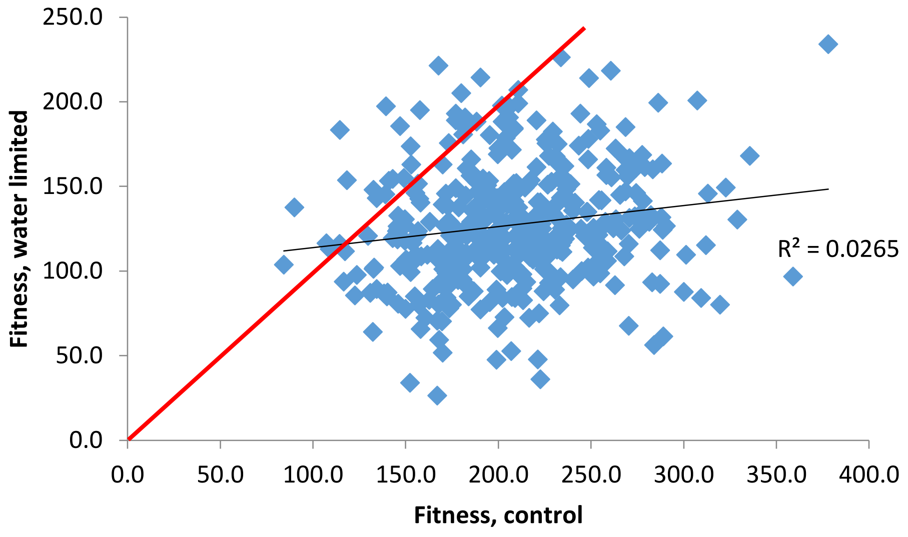


Figure 8. The fitness (total number of fruits) in the water limited environment plants compared to fitness of the plants in the control environment. The red line represents a 1:1 ratio or equal fitness in both environments. Each dot represents the average of the three replicates of each line. Any dot to the left of the red line has a higher fitness in the water-limited environment than the control environment.

Table 1. ANOVA table. Significant values ($p < 0.05$) are in bold.

	df	F	p
Days to first flower			
Trt	1	2.642	0.104
Line	399	1.164	0.025
Trt x line	399	0.945	0.757
Height			
Trt	1	1661.531	**.000**
Line	399	1.110	.090
Trt x line	399	1.032	.339
Basal branches			
Trt	1	539.004	**.000**
Line	399	1.131	.057
Trt x line	399	1.050	.266
BRANCH			
Trt	1	.297	.586
Line	399	.986	.566
Trt x line	399	.875	.949
NODE			
Trt	1	7.519	**.005**
Line	399	1.046	.280
Trt x line	399	.929	.815
FRUIT			
Trt	1	1121.550	**.000**
Line	399	1.274	**.001**
Trt x line	399	1.162	**.027**

Table 2. Means (± standard deviation) of all the traits measured in the two treatments

	Control	**Water-limited**
Days to first flower	26.0 (± 2.380)	26.2 (± 3.050)
Plant height	45.6 (± 4.210)	30.8 (± 6.700)
Basal branches	2.7 (± 0.692)	1.3 (± 1.530)
Nodes	3.9 (± 1.810)	4.1 (± 2.190)
Branches	3.9 (± 0.981)	3.9 (± 1.342)
Fruit	208.1 (± 8.74)	127.9 (± 7.621)

Table 3. Selection coefficients. Values for β and γ in the water limited environment (a) and the control environment (b). Values presented account for relative fitness.

a) Water limited

	β ± SE	**P-value**	**γ ± SE**	**P-value**
Height	0.304 (± 0.160)	0.000	1.328 (± 0.018)	0.000
Basal branches	0.359 (± 1.050)	0.000	0.046 (± 0.003)	0.826
Branch number	0.331 (± 1.850)	0.000	0.998 (± 0.003)	0.000
Node number	-0.260 (± 1.910)	0.672	0.508 (± 0.004)	0.024
Day to first flower	-0.220 (± 0.480)	0.000	-0.460 (± 0.008)	0.043

b) Control

	β ± SE	**P-value**	**γ ± SE**	**P-value**
Height	0.265 (± 0.170)	0.000	0.154 (± 0.004)	0.009
Basal branches	0.298 (± 1.210)	0.000	0.062 (± 0.002)	0.768
Branch number	0.092 (± 1.370)	0.012	0.152 (± 0.002)	0.466
Node number	0.690 (± 2.390)	0.017	0.240 (± 0.007)	0.321
Day to first flower	0.054 (± 0.001)	0.067	0.192 (± 0.005)	0.350

Table 4. Pearson correlation values- water-limited environment. Asterisks indicate strong correlations.

		Days to first flower	Height	Basal	Branch	Node	Fruit
Days to first flower	Pearson correlation	1	**0.396****	**-0.342****	**0.502****	**0.650****	**-0.072**
	P-value		0.00	0.00	0.00	0.00	0.015
Height	Pearson correlation		1	-0.041	**0.286**	**0.313**	**0.289**
	P-value			0.162	0.00	0.00	0.00
Basal	Pearson correlation			1	**-0.277**	**-0.363**	**0.339**
	P-value				0.00	0.00	0.00
Branch	Pearson correlation				1	**0.877**	**0.186**
	P-value					0.00	0.00
Node	Pearson correlation					1	**0.087**
	P-value						0.003
Fruit	Pearson correlation						1
	P-value						

Table 5. Pearson correlation values- control environment. Asterisks indicate strong correlation.

		Days to first flower	**Height**	**Basal**	**Branch**	**Node**	**Fruit**
Days to first flower	Pearson correlation	1	**0.124****	**-0.313****	**0.423****	**0.488****	0.051
	P-value		0.00	0.00	0.00	0.00	0.08
Height	Pearson correlation		1	-0.111	0.128	0.121	0.078
	P-value			0.00	0.00	0.00	0.00
Basal	Pearson correlation			1	-0.309	-0.329	0.043
	P-value				0.00	0.00	.141
Branch	Pearson correlation				1	0.969	0.011
	P-value					0.00	0.701
Node	Pearson correlation					1	0.013
	P-value						.656
Fruit	Pearson correlation						1
	P-value						

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4. Assessing the fitness of different types of hybrids

Abstract

Habitat fragmentation commonly causes genetic problems and reduced fitness when populations become small due to inbreeding depression. Introducing new alleles from other populations often alleviates the deleterious effects of inbreeding and enriches genetic variation. However this practice is not widely used in conservation due to the potential of outbreeding depression. The risks of outbreeding depression are not thoroughly understood as most of the empirical studies have been on populations that do not have a documented genetic history and are already failing. It is not known how the type of hybridization (i.e. among closely related populations, or among individuals from similar or different environments, etc.) affects the outcomes of hybridization. It is possible that not all hybrids will respond identically, and we need to understand what causes some hybrid crosses to result in a decrease in fitness and others to create healthy populations. In order to add to the growing body of knowledge on this topic, we created hybrid populations of *Arabidopsis thaliana* from experimental lines that had been selected for early flowering in different growth environments over multiple generations. I aim to address the following questions: 1) Do hybrids between populations adapted to different conditions show reduced fitness? 2) How does the growing environment affect the fitness of the hybrid populations? To address these questions, I looked at flowering time (the trait for which populations have been selected) and rate of leaf development (as a measure of growth and fitness). We have found that the outcome of introducing new genes differs between traits. We found no evidence of outbreeding depression in the F1 generation although the adaptation for early flowering was not seen in the hybrid populations.

4.1 Introduction

Population fragmentation is a major contributing factor to the risk of population extinction in the wild (Tillman *et al.* 1994, Reed 2004). A consequence of habitat fragmentation is that dispersal and gene flow are limited between populations. The value of increased intraspecific diversity is evident from the negative impacts of its loss on populations through inbreeding and genetic drift (Frankham 2005). Genetic diversity plays a fundamental role in the evolutionary history and future evolutionary path of a species (Forest *et al*. 2007). Theory indicates that the potential for adaptation to maintain population growth and evade extinction depends on the rate of environmental change relative to the adaptive capacity which is determined by genetic diversity (Lynch *et al*. 1991; Lynch and Lande 1993). One potential source of the genetic diversity necessary to reverse the effects of inbreeding and render the population capable of adaptation is hybridization with individuals from genetically healthy populations. Management practices are often designed to increase the level of gene flow in remnant populations (Seddon 2007, Miller *et al*. 1999). These controlled dispersal methods ultimately aim to reduce the probability of population extinction by increasing local population sizes in order to alleviate any negative effects of inbreeding depression (Frankel 1983; Pimm *et al*. 2006). However, another possible consequence of induced dispersal or intermating is that distantly related populations hybridize, producing a spectrum of fitness outcomes in the offspring, from hybrid vigour to hybrid breakdown, also referred to as outbreeding depression.

There is still is much debate amongst scientists about the widespread use of crossing populations. To correctly manage the risk of outbreeding depression, the manager of a wild population needs to know the probability of each of these outcomes. There is not a complete understanding about what causes a population to suffer from outbreeding depression as there is little information about the frequency of outbreeding depression experienced by a wild population (Frankham 2011). In addition, these populations previously studied are already failing and in extreme distress due to genetic and/or environmental stresses (Spielman and Frankham 1992; Marr *et al*. 2002). The genetic history of these populations is not known so it is difficult to ascertain what is leading to the reduction in fitness after mating with new individuals. When introducing new alleles into a population to reverse the effects of inbreeding, we do not yet know how to choose the population that will be best suited to provide an increase in fitness. Essentially, we need to know which hybrid cross will eliminate the risk of outbreeding depression. Do we introduce individuals selected to thrive in an environment similar to that of the affected population? Or is it more beneficial to choose individuals from a different environment with hopes that it will create more diverse offspring, capable of adaptation?

In this study, I use *Arabidopsis thaliana* to examine the effect of crossing populations that have been subjected to selection for early-flowering in two different environments to determine the effect of hybridization on the fitness of the F1 generation. I address the following questions: How do hybrid populations differ from their pure parental populations? How does the growing environment (winter-annual or spring-annual growth conditions) affect the fitness of the F1 generation of the hybrid crosses?

Arabidopsis thaliana is a model system where the use of genetics in conservation can be well tested. *Arabidopsis,* a member of the Brassicaceae family, has a fast life cycle, produces many progeny, and can be easily grown in a greenhouse or indoor growth chamber. It has a wide geographic range and natural genetic variation across its ecotypes (Hoffman 2002). The genome of *Arabidopsis* is relatively small and can be manipulated quite easily (www.arabidopsis.org). The combination of these characteristics makes it an ideal organism for bringing together genetics and conservation to study the role that genetics can play in efforts to conserve genetic diversity and ultimately, biodiversity.

4.2 Methods

Plant material and growth conditions

We used *A. thaliana* lines selected for early flowering for five generations under simulated winter and spring-annual conditions have been previously described in detail in Scarcelli *et al*. (2007) and Kover *et al*. (2009). Control lines, were simultaneously produced using the same breeding design but the parents were randomly chosen every generation.

We tested the effect of hybridizing plants adapted to different environments by comparing flowering time and rosette size of pure and hybrid lines. We produced 6 types of hybrids: early flowering selected in spring x early flowering selected in spring, early flowering winter x early flowering winter, early flowering winter x early flowering spring, and control x control. For each cross type there were two different combinations of populations. Each type of cross was produced by combining two different populations, 30 crosses between each pair of populations were made (4X2X30=240 crosses)

Five seeds from each cross were planted into each 5.5cm diameter round pots filled with F2+S: Seed & Modular + Sand soil (Levington). These were placed into 16 trays with 24 or 25 pots per tray. Trays had a water reservoir that ensured equally distributed amounts of water throughout the experiment. These were placed in the dark at 4ºC for 3 days to promote germination, and then split into two growth chambers programmed to simulate a 'winter-annual' or a 'spring-annual' growth condition (as described in Scarcelli *et al*. 2007). A total of 420 plants were grown in each growth environment: 240 hybrid plants, 60 pure early flowering winter parents, 60 early flowering spring parents, 60 control parents.

Plants were inspected daily and germination date and day for the appearance of floral buds (bolting) were recorded. Any subsequent seeds that germinated where removed. Plants were moved to an ambient temperature greenhouse to mature once flowering began. Flowering time was defined as the number of days between germination and the appearance of the first flower. Total number of leaves at flowering was counted. Two measurements of the diameter of the rosette were taken and then averaged to determine rosette size at time of first flower. Both leaf number and rosette diameter are good indicators of vegetative size and was used as a proxy of fitness.

4.3 Results

Hybrid populations v. pure populations

To determine if the fitness of the hybrid populations was different from that of the pure populations we compared three traits (days to first flower, total leaf number and rate of leaf production) using ANOVA. There was a significant difference ($p < 0.05$) in days to first flower, total leaf number and rate of leaf production between the hybrid populations and the pure populations in both growth environments (see Figure 1). The hybrid populations flowered later than the pure populations in both winter-annual and spring-annual growth conditions, indicating loss of adapted trait (early flowering) (Figure 1a). The hybrid populations had more leaves than the pure populations under both growth conditions, suggesting the occurrence of hybrid vigour (Figure 1b). The rate of leaf production in the hybrid populations was greater than the pure populations under both growth conditions (Figure 1c).

Days to first flower

In order to determine if the hybrid crosses were significantly different from their parent populations a post-hoc Tukey test was performed. Under spring-annual growth conditions (Figure 2a) the early flowering spring x early flowering spring (sxs) crosses had no significant ($p = 0.685$) effect on the number of days until the first flower in comparison to the pure spring populations. The cross between the early flowering winter (wxw) plants resulted in plants that flowered significantly ($p < 0.05$) later than the pure winter populations. Crossing early flowering spring and early flowering winter lines (sxw) and growing them in spring-annual growth conditions resulted in plants that are more similar to the early flowering winter plants and flowered significantly ($p<0.001$) later than the spring pure parents.

When grown in winter-annual growth conditions (Figure 2b) the early flowering spring x early flowering spring (sxs) crosses and the early flowering winter x early flowering winter (wxw) crosses flowered significantly ($p < 0.05$) later than their respective pure parent population. The early flowering spring x early flowering winter (sxw) cross resulted in plants that flowered significantly later than the both the spring ($p<0.001$) and the winter ($p<0.05$) pure parent populations.

Rate of leaf development

Under spring growth conditions only the control x control cross showed a significant ($p<0.05$) decrease in the rate of leaf production compared to the control parent population. There was no significant difference in rate of leaf development between the other cross populations (sxs, sxw, wxw) and their respective parent population (Figure 3a). In contrast, when grown in winter-annual growth conditions all of the crossed populations had a significantly ($p < 0.05$) higher rate of leaf development than the parent populations (Figure 3b).

Total leaf number

The total number of leaves at flowering was counted for each plant as a measure of fitness. When grown in spring-annual conditions (Figure 4a), the sxs crosses and the sxw crosses had significantly ($p < 0.001$) more leaves than the pure parent spring population. The wxw crosses and the sxw crosses did not show a significant difference in total leaf number when compared to the pure winter parent population.

In winter-annual growth conditions (Figure 4b) all of the hybrid populations had significantly ($p < 0.001$) more total leaves than their corresponding parent populations. The sxw crosses had significantly ($p<0.001$) more leaves than the winter parent populations but no significant difference when compared to the spring parent populations.

4.4 Discussion

The amount of hybridization between remaining remnant populations will be a key element in determining the genetic consequences of habitat fragmentation. This is an issue that many conservationists are becoming more concerned with as genetics begins to play a larger role in efforts to maintain isolated populations. Even though this experiment just begins to touch on the consequences of interbreeding populations and is just a stepping stone in my research project, the results from this study can provide some insight into how mating related populations can affect different traits. Our results show that the scepticism towards using hybridization for conservation is not justified when populations that are closely related are concerned as we detected little evidence of outbreeding depression in the F1 generation. However, we do see a loss of the early flowering time adaptation indicating that perhaps any adaptations important for fitness in their local environment could be lost during hybridization. It is possible that further recombination of later generations could suffer from a loss of fitness. There was a positive effect of interpopulation breeding on fitness (rate of leaf development) when the plants were grown in winter-annual conditions yet no significant increase in fitness when grown in the spring. One plausible explanation for this is that gene for early-flowering in the spring is acting to speed up leaf production. In the winter-annual growth conditions the plants spend a longer time in the vegetative phase before producing their first flowers.

Interestingly, crossing the early-flowering spring plants with the early-flowering winter plants resulted in individuals that flowered later than the spring and winter parent populations and later than the crosses between individuals of the same selection environment. Crossing individuals that were both selected for early flowering but in different environments could cancel out the selection and suggests that the plant needs two copies of the gene in order to maintain the trait selected for.

We have shown that the outcome of the hybridization differs between traits. In addition, there is a difference in response depending on which populations are interbred. These are important results that could be useful for conservation scientists. This is potentially quite important when trying to create a population which will have maximum fitness in a particular environment. In conjunction with proposed future climatic models, understanding which traits are improved with intermating between populations could become a useful tool for managing wild populations.

4.5 Figures and tables

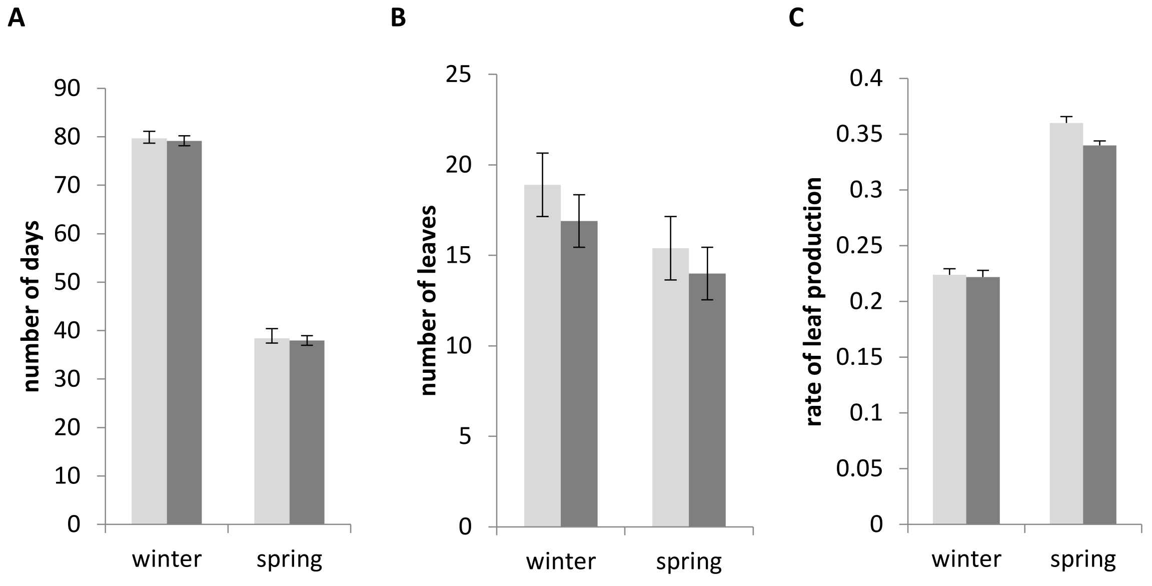
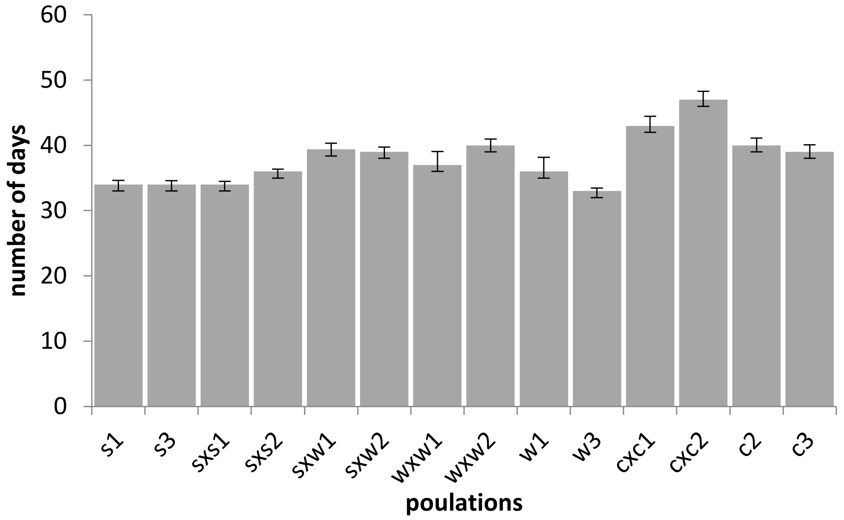


Figure 1. Comparison of hybrid populations and pure populations in winter-annual growth conditions and spring-annual growth conditions. A) number of days to first flower B) total number of leaves C) rate of leaf production. Rate was calculated by number of leaves/days since germination Hybrids are light grey bars, pure populations are dark grey bars.

A) Spring



B) winter

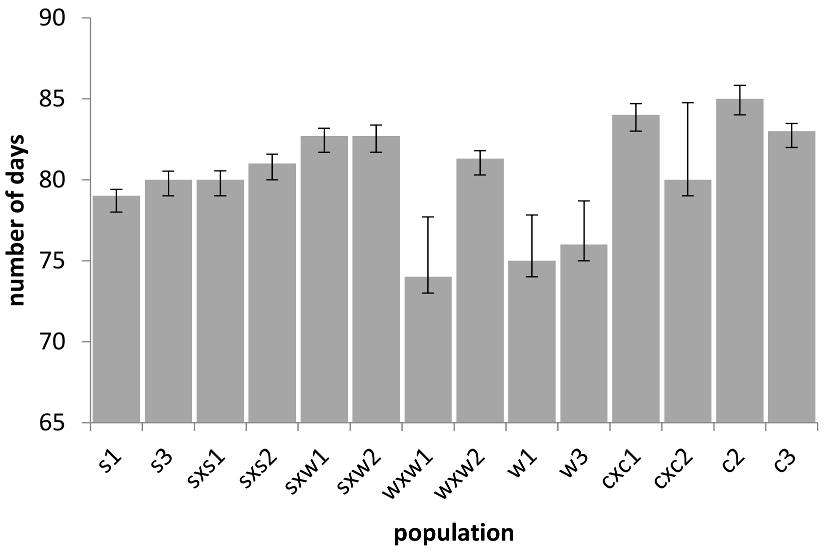
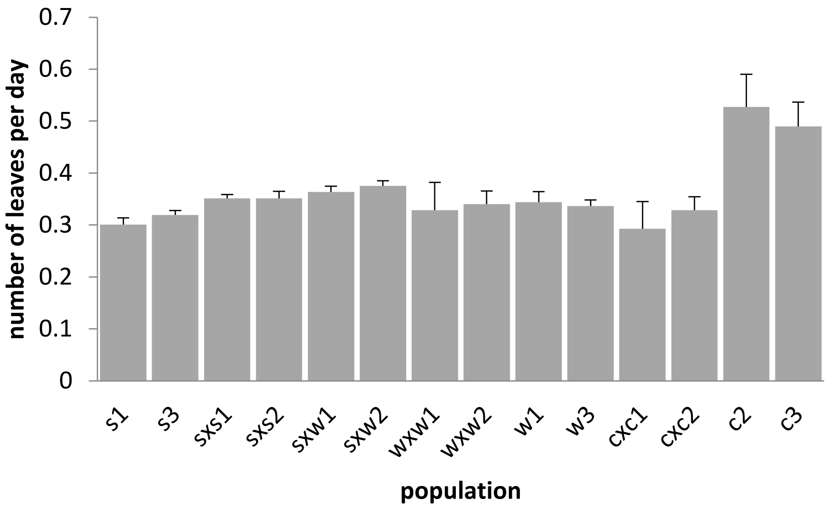


Figure 2. Number of days to first flower in A) spring-annual and B) winter-annual growth conditions. sxs= early flowering spring x early flowering spring; sxw= early flowering spring x early flowering winter; wxw= early flowering winter x early flowering winter; cxc= control x control; s= early flowering spring pure parent population; w=early flowering winter pure parent population; c=control parent population.

A) spring



B) winter

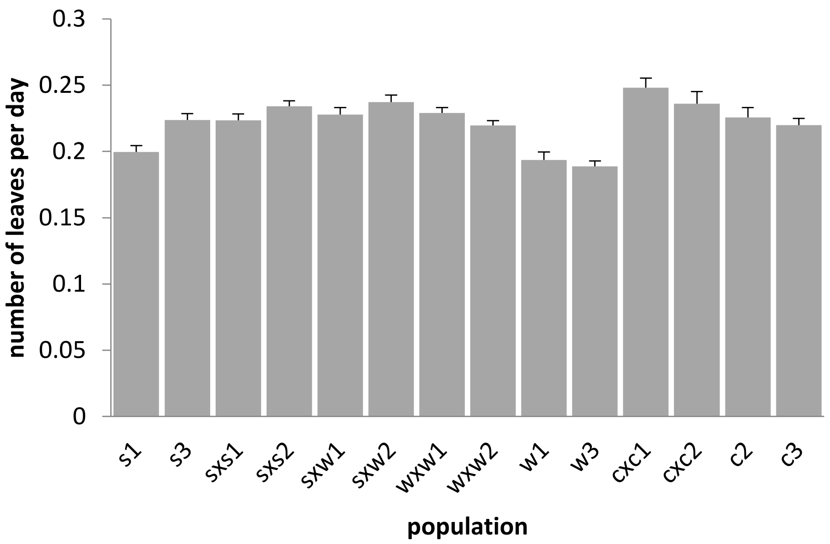
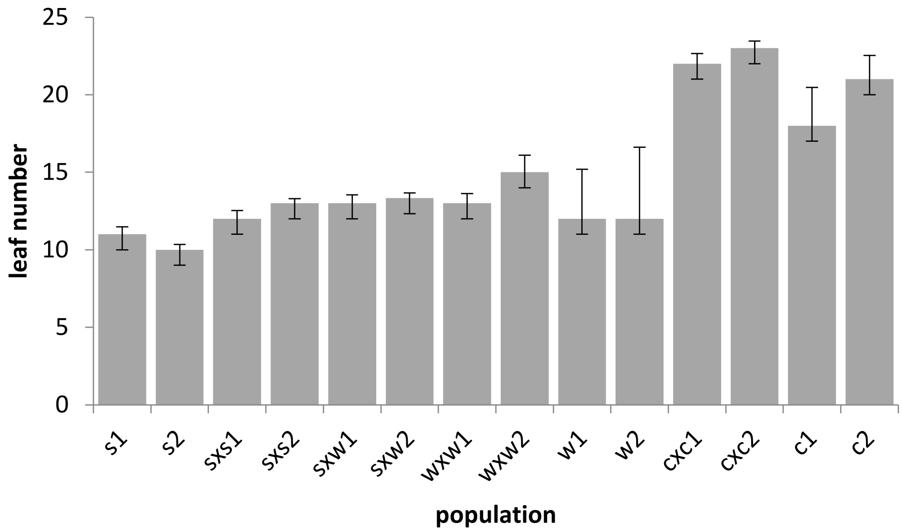


Figure 3. The rate of leaf development in plants grown in A) spring-annual and B) winter-annual growth conditions. Rate was calculated by number of leaves/days since germination. sxs= early flowering spring x early flowering spring; sxw= early flowering spring x early flowering winter; wxw= early flowering winter x early flowering winter; cxc= control x control; s= early flowering spring pure parent population; w=early flowering winter pure parent population; c=control parent population.

A) Spring



B) winter

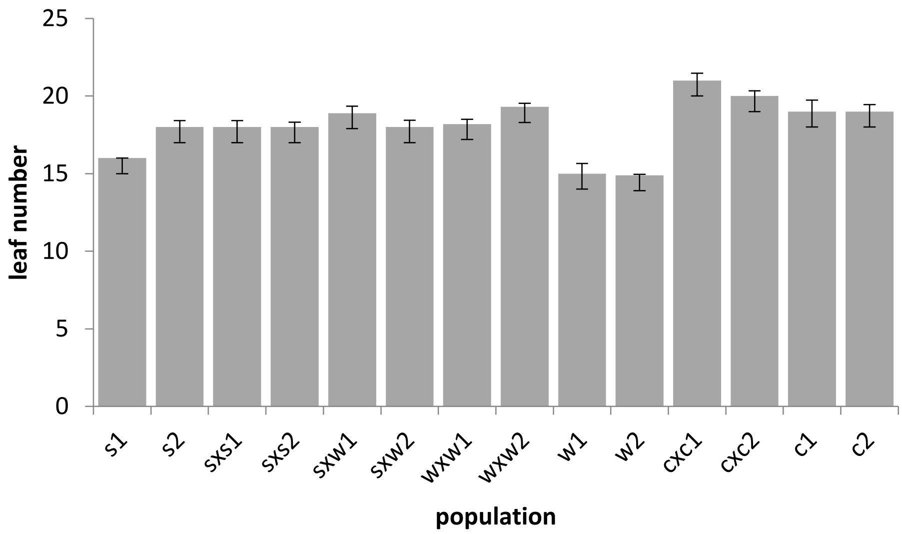


Figure 4. Total leaf number in A) spring-annual and B) winter-annual growth conditions. sxs= early flowering spring x early flowering spring; sxw= early flowering spring x early flowering winter; wxw= early flowering winter x early flowering winter; cxc= control x control; s= early flowering spring pure parent population; w=early flowering winter pure parent population; c=control parent population.

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5. Does previous selection for early flowering affect the initial tolerance to wilting in *Arabidopsis thaliana*?

Abstract

Climate change and human disturbance leading to habitat fragmentation have been identified as key drivers in the loss of biodiversity. One key tool for maintaining threatened species is genetic rescue through hybridization but we don't fully understand if this can work for locally adapted populations under strong selection. Two understudied, critical questions are will these locally adapted populations be capable of adapting when faced with novel environments and is hybridization a tool that will provide populations the adequate genetic variation necessary for adaptation? Combining a hybridization study with a selection experiment will shed light on how these new populations will respond to climate change. To do this plants previously selected for early flowering were subjected to a selection for drought tolerance for three generations. To assess how hybrid populations respond to selection hybrid populations were created from plant lines that had been selected to flower early under different growth conditions. We found that plants that had previously undergone a strong selection for early flowering were initially more tolerant to drought than unselected plants but the advantage was lost after three generations of a selection for drought tolerance. The hybrid populations made up of plants not previously selected for early flowering were the only populations to be more fit than their parent population. There was heterogeneity in the response to the selection amongst the hybrid populations. The results indicate that using genetic rescue to increase adaptive potential is specific to the population combinations.

5.1 Introduction

Climate change and human disturbance leading to habitat fragmentation have been identified as key drivers in the loss of biodiversity (Walther *et al*. 2002; Bellard *et al*. 2012; Hooper *et al*. 2012). These pressures lead to populations being placed under strong selection and local adaptation simultaneously. One key tool for maintaining threatened species is genetic rescue through hybridization but we don't fully understand if this can work for locally adapted populations under strong selection. Two understudied, critical questions are: 1. will these locally adapted populations be capable of adapting when faced with novel environments and, 2: is hybridization a tool that will provide populations the adequate genetic variation necessary for adaptation?

A major consequence of fragmentation is that population sizes shrink and become isolated leading eventually to a reduction in population performance due to increased genetic differentiation between populations, reduced genetic variation, and increased genetic inbreeding (Templeton *et al*. 1990; Ellstrand & Elam 1993; Young *et al*. 1996). Genetic rescue through the introduction of new genes or introgressive hybridization is thought of as a useful approach to alleviating the various effects of inbreeding depression (Tallmon *et al*. 2004; Baskett & Gomulkiewicz 2011; Pickup *et al*. 2013). Hybrid populations may have higher genetic diversity and increase evolutionary potential but hybridization may also introduce maladapted genes (Nagy 1997; Edmands 2007; Dudash & Fenster 2000). Complex interactions among genetic and non-genetic factors, such as epistasis, and demography, play a role in determining whether or not the introduction of new genes will be positive (Tallmon *et al*. 2004).

Not only is there little understanding about the use of introgressive hybridization to increase population fitness, there are even fewer studies focused on the adaptive potential of these rescued populations. Adaptation is considered to be essential to long term success under climate changes. Due to differences in evolutionary histories, populations can differ in genetic isolation and adaptation to local environments. Therefore, populations may differ in standing genetic variation of potential adaptive value under environmental change. Plants that are locally adapted to a specific environment may not be able to respond successfully when faced with a new stress. As global climate continues to change, it is very likely that plants will experience novel environments. There is not much known about the ability of a plant to respond to a new environment if it has already undergone selection for a different trait. Additionally, it is not well understood how to choose which population to mix with the failing population in instances of genetic rescue. We are interested in understanding how plants respond to selection for drought tolerance after being selected for early flowering. Combining a hybridization study with a selection experiment will shed light on how these new populations will respond to climate change. To do this I created hybrid populations from *Arabidopsis thaliana* populations that had been selected for early flowering. I then subjected the hybrid plants to a selection for drought tolerance. Studies of the interaction of hybridizing populations can increase our understanding of evolutionary processes and this information can be used to advise conservation managers.

Arabidopsis thaliana is an ideal model system to gain understanding of how plants previously selected for early flowering respond to selection for drought tolerance. *A. thaliana,* a member of the Brassicaceae family, is one of the most thoroughly studied plant species (Koornneef & Meinke 2010). Important features include a short generation time, small size and prolific seed production. *A. thaliana* spans a wide geographic range with varying climates from central Asia and Europe to North America (Hoffmann 2002). The variation among its natural accessions plus the fact that it is capable of inbreeding, makes it an ideal species for studying adaptation.

This study was conducted to determine how previous selection for early flowering affects the initial response of *Arabidopsis thaliana* to drought, and how intercrossing populations adapted to different environmental conditions affect this response. I ask the following questions: 1) How does the response to drought differ between individuals that have been previously selected for early flowering and those which have not? 2) How does crossing within and between populations that have previously undergone strong selection affect the response to drought? 3)

I expect the populations previously selected for early flowering to initially have more tolerance to the drought. . However, I expect the control populations to be better able to respond to the drought and following the selection for drought tolerance, I expect the control plants to have a higher fitness. I expect the crosses of similar populations to respond better and have higher fitness than outcrossed populations made up of individuals that had previously been locally adapted for different growth conditions.

5.2 Methods

Creating the outcrossed populations

This study used lines of *Arabidopsis thaliana* that had been selected for early flowering for six generations in two different growth environments: spring annual growth conditions and winter annual growth conditions and were previously described in Scarcelli *et al.* (2007) and Kover *et al*. (2009). Both control and selected lines were derived from an outbred population created band by randomly mating 19 accessions of *A. thaliana.* Figure 1 shows the creation of the lines used in this study.

We used selfed seeds from two lines selected to flower earlier in spring annual growth conditions and two lines selected to flower early in winter annual conditions. From each selection line we grew seeds collected from the 50 earliest flowering plants in the last generation of the selection experiment described in Kover *et al*. (2009). In addition, 50 randomly selected plants from two control lines from the spring annual growth conditions were also grown. These control lines experienced no selection but did experience similar bottleneck as the lines that were selected for early flowering.

Approximately five seeds from each plant were planted into 2.5mL Sankey® pots filled with F_2S: Seed & Modular + Sand soil (Levington). These pots were randomly distributed over 16 trays and stratified in the dark at 4ºC for three days prior to being moved into a growth chamber (Arabidopsis Series, Percival Scientific) set at 21°C during the day/18°C at night with 16 hours of light per day; an environment which had not been experienced by any of the lines for the last 6 generations.

The plants in each population were crossed to create the following outcrossed populations: spring x spring, winter x winter, spring x winter, control x control. Each plant was randomly assigned to each cross as either the male or the female parent. All crosses were done manually after the flower from the female plant had been emasculated using a dissecting microscope. This resulted in 25 crosses between each population pair. The seeds resulting from these crosses were collected and subsequently grown in a growth chamber. At maturity the seeds were collected. These seeds will be referred to as generation 0 in this multi-generation experiment.

Selection for plants more tolerant to water limitation

Two hundred individuals of each population (eight replicates of each of the 25 crosses) were sown in 2.5 mL Sankey pots filled with F2+S soil (Levington® Seed and Modular Compost, The Scotts Company, UK). Pots were placed in plastic trays with each tray holding twenty four pots.

To avoid position effects, trays were rotated around the greenhouse weekly. On the day watering began, a chloronicotinyl insecticide (Intercept® 70WG, The Scotts Company, UK) was applied at 0.2 g product per litre of water. After seeds had germinated, a single seedling was kept in each pot and allowed to grow in greenhouse conditions (24 ± 5ºC; 16-h-light/8-h-dark photoperiods). Pots were watered by sub-irrigation three to four times per week so that the soil was always kept damp.

Fourteen days post germination water was withheld from all pots. Plants were monitored daily for day of first flower and signs of stress due to lack of water (i.e. wilting or leaf curling). After ten days of withholding water, watering resumed as normal. Only the 50 most tolerant (i.e. showing the least signs of stress) were allowed to contribute to the next generation of plants. Just prior to re-watering, the 50 least wilted plants in each population were identified. These 50 plants were randomly assigned mates and crossed. All 25 crosses within each population were done manually with the help of a dissecting microscope after the flower from the female plant had been emasculated. Three crosses per pair were done to ensure there were enough seeds for the next generation.

This was repeated for two more generations for a total of 3 generations of selection. The same method was used for each generation. The seeds produced by plants after the 3 generations of selection will be referred as generation 3 seeds.

Traits recorded

The date of germination was recorded for every plant along with the day to first flower. Number of days to first flower was calculated as the number of days between germination and the day the first flower bud opened. After the plants senesced plant height and total fruit number were recorded.

Data analysis

To determine if the plants selected for tolerance to drought over three generations resulted in plants that were significantly more fit when drought occurs, I used ANOVA to compare the plants from GEN 0 and the plants from GEN 3. Post-hoc Tukey HSD tests were used to determine which populations were significantly different.

To determine which type of outcrossing resulted in plants that had the highest fitness I compared the different populations in GEN 3 using ANOVA.

5.3 Results

Does previous selection affect initial response? How do the parent lines respond to the initial drought? And how do they respond to three generations of selection for drought tolerance?

Generation 0:

The results indicate that early flowering increases tolerance for wilting during the initial exposure to drought conditions. When compared to the unselected control lines, the lines previously selected for early flowering in the spring annual growth conditions and in the winter annual growth conditions wilt significantly later (Tables 1, 2 and 3). It took the early flowering spring populations 9.92 and 8.37 days to wilt and the early flowering winter populations 10.17 and 8.72 days to wilt. The control populations wilted after just 6.62 and 7.63 days.

Changes in wilting time from Generation 0 to Generation 3:

As expected, after the selection for late wilting (i.e. drought tolerance) for three generations both of the control lines wilted significantly later (Table 3). The number of days to wilting in the control lines increased by 4.44 and 2.59 days.

The populations that had previously been selected for early flowering in either spring-annual or winter- annual conditions, did not respond to the selection for drought tolerance in a similar way (i.e. the number of days to wilting did not increase in these populations in response to drought). On the contrary, one of the lines selected for early flowering under spring annual conditions (Spring 1) wilted significantly earlier than the plants from the same line in Generation 0 (Table 3). This suggests that the previous selection for early flowering is restricting the plants ability to respond to subsequent selection for a different trait.

Plant fitness:

After three generations of selection for drought tolerance both of the control outcrosses had significantly more fruits than any of the other populations (Table 4, Figure 2). Both of the winter outcross populations had the least number of fruits.

How does hybridization between previously selected populations affect drought tolerance?

In the initial exposure to drought, hybrid populations between control and winter plants were significantly more tolerant to drought than their parental population (Table 5). However, there is heterogeneity in the response among the hybrid populations. No significant differences were observed between the hybrid population and the parent population of the lines early flowering spring lines. Nor was there any difference seen when the hybrid population between both spring and winter selected line was compared to the spring parents and the winter parents.

Changes in wilting time from Generation 0 to Generation 3:

The control cross population, cxc2, and the spring cross population, sxs1, both wilted significantly later in Generation 3 than in Generation 0. The winter cross population, wxw2, wilted significantly earlier in Generation 3 than in Generation 0. The cross populations, cxc1, sxs2, sxw1, sxw2, and wxw1did not show any significant change in number of days to wilting from Generation 0 to Generation 3 (Table 6).

Days to first flower

Generation 0 to generation 3:

There was heterogeneity in how the number of days to first flower changed over the course of the selection. Four of the crossed populations- cxc1, cxc2, sxs2 and wxw2-flowered significantly later in generation 3 than in generation 0 (Table 7). The sxs1 and the sxw1 crosses flowered significantly earlier in generation 3. There was no change in flowering time from generation 0 to generation 3 in lines sxw2 and wxw1.

Phenotypic traits: How does plant height change from generation 0 to generation 3?

Three generations of selection for drought tolerance significantly affected the plant height in only 3 of the experimental lines – winter 2, cxc 1 and wxw 1. The plants in these populations were taller in generation 3 than they were in generation 0 (Table 8). The other populations showed no difference in plant height between generation 0 and generation 3.

Comparing hybrids to parents:

In Generation 0, the control 2 cross population and the winter 1 cross populations were the only crossed populations that significantly differed in height when compared to their parent population (Table 9). Both of these outcrossed populations were shorter than the parent population (see Table 8 for mean plant height).

In Generation 3, the control 1 outcross and the winter 2 outcross were significantly different than their parent population (Table 10). The control cross plants were taller than the plants in the parent population whereas in the winter cross population the plants were shorter than the parents (see Table 8 for mean plant height).

5.4 Discussion

Mixing populations of species that normally would not intercross in an attempt to create new, high fitness populations is risky. Not enough is known about how any previous selection the populations may have undergone will affect the way the hybrid populations will perform. Nor about what types of combinations result in the healthiest populations. Is it best to choose populations that have undergone similar selection? Or should we be choosing populations that are dissimilar?

I have used a multi- generation selection experiment for drought tolerance on populations that have previously been selected for early flowering to determine how previous selection may affect the ability of populations to adapt to new environmental conditions. I have also created hybrid populations and subjected those to selection for drought tolerance to understand how the introduction of new genes affects the ability of a population to respond and adapt to new environments.

It has been shown that one mechanism by which plants avoid drought is through early flowering (Verslues & Juenger 2011). From this we can hypothesize that plants that flower early will have an advantage in a drought over plants that do not flower early. The early flowering plants in this experiment did wilt later than the control plants during the first exposure to the drought. However, the number of fruits produced was not counted in the initial exposure to drought so it is not clear whether the later wilting resulted in more fruit.

After three generations of selection for drought tolerance, I found that (except for one population) the plants that had previously undergone selection for early flowering did not change the number of days to wilting. Only one of the early flowering spring parent populations wilted earlier after the selection in contrast to the later wilting seen by plants in both of the control populations. This result supports my hypothesis that strong selection for early flowering decreases an individual's ability to then respond to a second selection for a different trait. There are two possible explanations for the lack of a response in the early flowering populations. It could be that they respond more slowly and that three generations of selection is not enough time to see a response. However, Kover *et al* (2009) saw a large change in flowering time over six generations. The other possibility is that there is not enough genetic diversity to elicit a significant response in the number of days it takes the plant to wilt.

The control hybrid plants were the only hybrid population to produce significantly more fruits than their respective parent population and show signs of hybrid vigour.

Hybrid populations

The majority of the hybrid populations did not show a significant response to selection. One of the control and one of the spring intercross populations did wilt later after the selection. This discrepancy in response makes it difficult to reach a clear conclusion with regards to the ability of genetic rescue to aid in increasing adaptive potential. It suggests though that is specific to specific combination of populations.

There is much debate about using the introduction of new genes to counteract the negative effects of population isolation (Pertoldi *et al*. 2007; Frankham 2010; Frankham *et al*. 2011). The results from this experiment confirm the theory that when intercrossing populations that have adapted to different local conditions there is the potential to create individuals that do not perform well. All of the outcrossed populations made up of plants previously selected for early flowering had less fruits than their respective parent population in generation 3. This indicates that the progeny of individuals that have undergone strong divergent selection, when crossed and exposed to a new environmental stress have the potential to be less fit than their parental population. Since the hybrid populations derived from unselected lines had more fruits than the control parent plants, they suggest that hybrid vigor is dependent on previous selection history (Baack & Rieseberg, 2007; Burke & Arnold, 2001; Moore & Lukens, 2011; but see Weigel, 2012). Since the spring and winter parent populations had similar number of fruits to the control parent plants, it is not the previous selection that is causing the plants to have less fitness but the crossing.

One of the best known and well documented plant responses to climate change is a shift in flowering time with most plant species flowering earlier in the spring (Fitter & Fitter 2002; Johansson *et al*. 2013; Ibáñez *et al*. 2010; Parmesan 2006). Early flowering is often associated with drought escape or avoidance (Franks 2011; Juenger 2013). Ideally, a plant would flower and produce seeds before experiencing detrimental effects from the drought. This strategy of avoidance is most useful when the occurrence of the dry period is later in the growing season, allowing for enough time for the seeds to be produced and mature before the water is limited. If the drought occurs shortly after germination, perhaps flowering early is no longer the best method to ensure survival since a flowering plant has more vegetative material to maintain and there would not be enough resources to produce healthy seeds.

Conclusion and future questions

There were no clear trends or patterns seen in the results, and this makes it very difficult to make one overall conclusion. Perhaps the only conclusion that can be made is that introducing new genes into any populations is risky, since it can reduce fitness and the evidence that it increases genetic diversity is equivocal. To further the work and obtain more information about how plants cope with new environments after undergoing previous selection, it would be useful to examine how the root to shoot ratio changes with selection for drought tolerance in these populations, because it has been shown that under conditions of water stress root length increases (Lui *et al* 2004) however, Gowda *et al*. (2011) conclude that the timing of the drought can reduce the amount of resources allocated for root growth. It has also been shown that stress tolerance in plants can be conveyed by the accumulation of osmolytes (Bray 1997, Hare *et al* 1998, Serraj & Sinclair 2002). It would be interesting to see if there was a difference in the accumulation of osmolytes between hybrid plants and non-hybrids. It is essential that we continue to study how different populations interact when admixed and how these outcrossed populations respond to different types of environmental change.

5.5 Figures and Tables

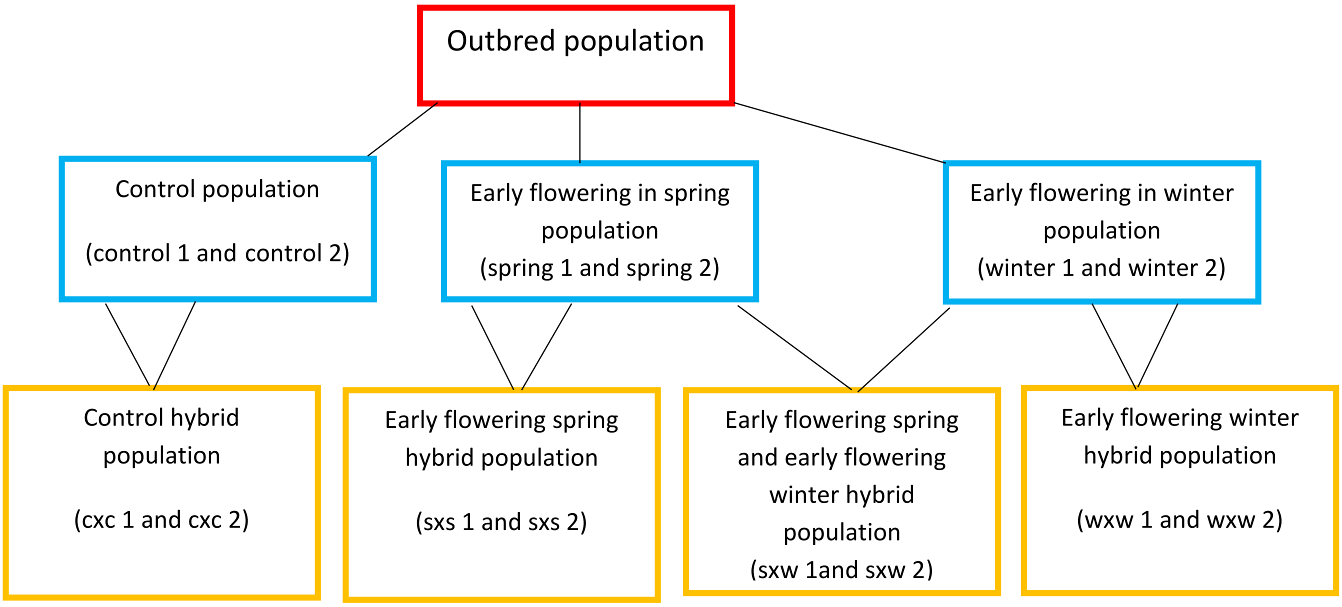

Figure 1. Explanation of the creation of the parent and hybrid populations. The red box at the top is the original outbred population. The blue boxes are the lines that were selected for early flowering in spring- annual growth conditions, winter-annual growth conditions and the control, unselected lines. The yellow boxes represent the hybrid populations created in this experiment.

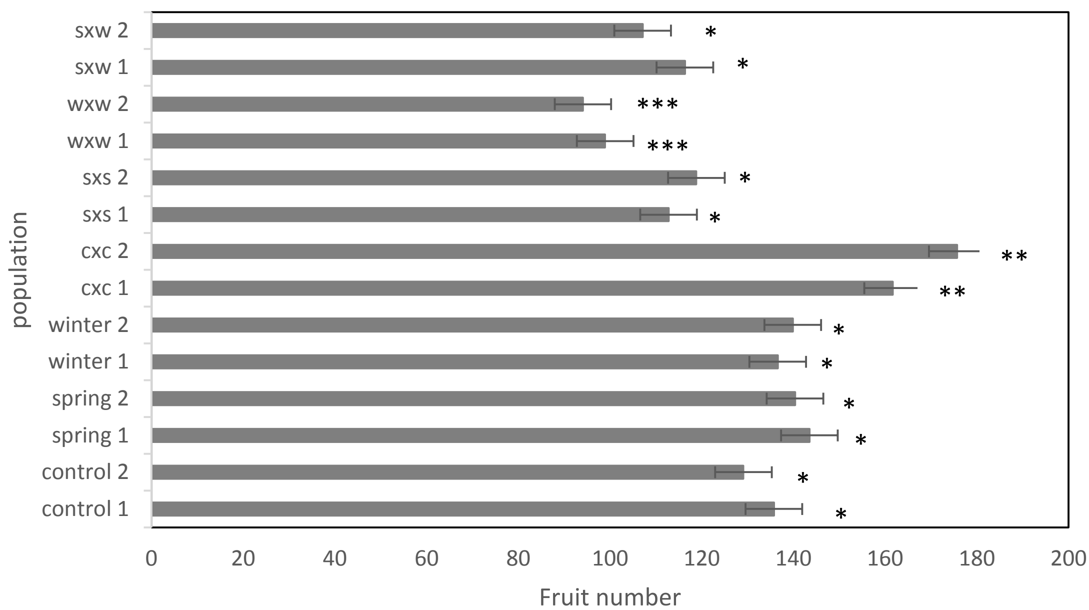

Figure 2. Average number of total fruits in each population. Fruit number was counted only in generation 3. Asterisks indicate significant differences (p<0.05).

Table 1. Days to wilt in the initial exposure to drought. ANOVA comparing the number of days to wilt in each parent population. P- values are significant at p<0.05.

	df	MS	F	P-Value
Between groups	5	140.70	15.17	0.000
Within Groups	442	9.27		
Total	447			

Table 2. Post hoc comparison (Tukey HSD) of number of days to wilting in the parent populations in Generation 0 and in Generation 3. Numbers in bold are significant at $p < 0.05$

Population		**Gen 0 P-value**	**Gen 3 P-value**
Control 1	Control 2	.330	.945
	Spring 1	**.000**	**.003**
	Spring 2	**.029**	**.044**
	Winter 1	**.000**	**.000**
	Winter 2	**.000**	.893
Control 2	Control 1	.330	.945
	Spring 1	**.000**	**.090**
	Spring 2	.909	.381
	Winter 1	**.000**	**.001**
	Winter 2	.252	1.00
Spring 1	Control 1	**.000**	**.003**
	Control 2	**.000**	.090
	Spring 2	**.003**	.992
	Winter 1	.999	.664
	Winter 2	.113	.445
Spring 2	Control 1	**.029**	**.044**
	Control 2	.909	.381
	Spring 1	**.003**	.992
	Winter 1	**.001**	.341
	Winter 2	.859	.787
Winter 1	Control 1	**.000**	**.000**
	Control 2	**.000**	**.001**
	Spring 1	.999	.664
	Spring 2	**.001**	.341
	Winter 2	**.042**	**.033**
Winter 2	Control 1	**.000**	.893
	Control 2	.252	1.000
	Spring 1	.113	.445
	Spring 2	.859	.787
	Winter 1	**.042**	**.033**

Table 3. Difference in the mean number of days to wilt (± standard deviation) in generation 0 and generation 3 in the parental lines (control, spring and winter). P-values and F are calculated with 1 degree of freedom. Numbers in bold are significant at $p < 0.05$.

Population	Gen 0	Gen 3	Difference (gen3-gen0)	F	p-value	If sig, did generation 3 wilt earlier or later?
Control1	6.62 ± 2.95	11.06 ± 1.49	4.44	120.80	**0.00**	**Later**
Control2	7.63 ± 3.57	10.22 ± 2.51	2.59	24.12	**0.00**	**Later**
Spring1	9.98 ± 2.28	8.77 ± 2.78	-1.21	7.94	**0.00**	**Earlier**
Spring2	8.37 ± 2.86	9.09 ± 3.59	0.72	1.72	0.19	
Winter1	10.17 ± 2.90	9.08 ± 2.73	-1.09	3.55	0.06	
Winter2	8.72 ± 3.39	8.51 ± 4.53	-0.21	0.09	0.75	

Table 4. ANOVA comparing the number of fruits in each population. P- values are significant at p<0.05.

	df	MS	F	P
Between groups	13	30468.179	9.764	.000
Within groups	870	3120.429		
Total	883			

Table 5. The effect of crossing on days to wilting in the initial exposure to drought. Experimental line crosses in Generation 0 compared to their respective parent lines to evaluate how hybridization effects the number of days until wilting occurs. The treatment is crossed or not crossed. P- values are significant at p<0.05.

		df	MS	F	P- value
Cxc to control	Pop	1	0.054	.005	0.945
	Treatment	1	244.378	21.638	0.000
	Pop*Treatment	1	69.348	6.140	0.014
Sxs to spring	Pop	1	216.176	28.69	0.000
	Treatment	1	4.541	4.541	0.439
	Pop*Treatment	1	172.339	22.814	0.000
Wxw to winter	Pop	1	0.612	.068	0.795
	Treatment	1	125.44	14.00	0.000
	Pop*Treatment	1	3.812	.426	0.515
Sxw to spring	Pop	1	1.689	.198	.656
	Treatment	1	19.257	2.261	.134
	Pop*Treatment	1	118.169	13.873	0.000
Sxw to winter	Pop	1	20.941	2.146	.144
	Treatment	1	11.123	1.140	.287
	Pop*Treatment	1	96.381	9.875	.002

Table 6. The effect of crossing on days to wilting after the selection for drought tolerance. Experimental line crosses in Generation 3 compared to their respective parent lines to evaluate how hybridization effects the number of days until wilting occurs. The treatment is crossed or not crossed. P- values are significant at $p<0.05$.

		df	**MS**	**F**	**P- value**
Cxc to control	Pop	1	32.773	4.680	**0.031**
	Treatment	1	34.306	0.069	0.793
	Pop*Treatment	1	7.331	4.471	**0.035**
Sxs to spring	Pop	1	126.491	13.035	**0.000**
	Treatment	1	126.491	13.035	0.681
	Pop*Treatment	1	164.144	16.915	**0.000**
Wxw to winter	Pop	1	0.558	5.916	0.821
	Treatment	1	64.737	0.051	**0.016**
	Pop*Treatment	1	10.944	2.770	0.097
Sxw to winter	Pop	1	12.495	1.106	0.294
	Treatment	1	5.019	0.444	0.506
	Pop*Treatment	1	0.900	0.080	0.778
Sxw to spring	Pop	1	41.248	4.352	**0.038**
	Treatment	1	6.704	0.707	0.401
	Pop*Treatment	1	9.478	0.319	0.573

Table 7. Difference in mean number of days to wilt (± standard deviation) of crossed populations in generation 0 and generation 3. P-values and F are calculated with 1 degree of freedom.

Population	Generation 0	Generation 3	Difference	F	p-value	If sig, did generation 3 wilt earlier or later?
Cxc1	9.37 ± 3.11	9.70 ± 2.00	0.33	0.46	0.497	
Cxc2	8.5 ± 3.80	10.07 ± 3.21	1.57	**6.004**	**0.016**	Later
Sxs1	6.7 ± 3.32	10.69 ± 3.54	3.99	**62.61**	**0.000**	Later
Sxs2	8.02 ± 3.18	7.54 ± 1.70	-0.48	1.202	0.275	
Sxw1	8.44 ± 2.79	8.28 ± 2.95	-0.16	0.09	0.754	
Sxw2	9.42 ± 3.38	8.63 ± 2.93	-0.79	2.168	0.143	
Wxw1	10.16 ± 2.79	10.08 ± 2.75	-0.08	0.012	0.969	
Wxw2	8.97 ± 2.88	7.96 ± 2.71	-1.01	**4.38**	**0.038**	Earlier

Table 8. Difference in mean number of days to first flower (± standard deviation) in the crossed lines in generation 0 and generation 3. P-values and F are calculated with 1 degree of freedom.

population	Generation 0	Generation 3	Difference	F	p-value	If sig, did generation 3 wilt earlier or later?
Cxc1	20.18 ± 2.59	22.82 ± 2.70	2.64	30.27	**.000**	Later
Cxc2	21.19 ± 2.75	24.17 ± 3.82	2.98	23.34	**.000**	Later
Sxs1	17.81 ± 1.06	17.03 ± 3.12	-0.78	4.17	**.043**	earlier
Sxs2	18.05 ± 1.63	19.58 ± 2.82	1.53	16.25	**.000**	Later
Sxw1	19.56 ± 3.12	19.37 ± 5.39	-0.19	0.07	.790	earlier
Sxw2	18.89 ± 2.78	19.45 ± 1.59	0.56	2.17	.142	
Wxw1	19.23 ± 2.98	19.55 ± 2.31	0.32	0.52	.471	
Wxw2	19.11 ± 4.74	20.89 ± 2.71	1.78	6.83	**.010**	Later

Table 9. Difference in mean plant height (inches, ± standard deviation) in generation 0 and generation 3 in the parental lines (control, spring and winter) and the hybrid lines (cxc, sxs, wxw, and sxw). P- values and F are calculated with 1 degree of freedom.

Population	Generation 0	Generation 3	Difference	F	p-value	If sig, did generation 3 wilt earlier or later?
Control1	39.7 ± 11.5	35.5 ± 14.76	-4.2	23.54	0.054	
Control 2	44.5 ± 14.4	43.1 ± 11.94	-1.4	18.76	0.516	
Spring 1	33.3 ± 9.23	34.2 ± 10.43	0.9	12.93	0.556	
Spring 2	35.5 ± 9.39	33.6 ± 11.81	-1.9	7.22	0.380	
Winter 1	40.4 ± 7.17	39.8 ± 7.91	-0.6	4.64	0.703	
Winter 2	37.1 ± 10.43	47.6 ± 10.83	10.5	13.85	**0.000**	**taller**
Cxc1	37.1 ± 12.49	44.2 ± 13.85	7.1	12.71	**0.004**	**taller**
Cxc2	37.8 ± 12.19	38.8 ± 15.14	1.0	11.73	0.666	
Sxs1	35.4 ± 11.01	32.0 ± 11.76	-3.4	8.92	0.079	
Sxs2	35.2 ± 8.38	33.1 ± 15.48	-2.1	5.48	0.309	
Sxw1	37.6 ± 12.52	38.4 ± 10.48	0.8	4.31	0.701	
Sxw2	36.3 ± 12.14	33.8 ± 12.77	-2.5	8.82	0.238	
Wxw1	37.0 ± 10.05	41.9 ± 12.17	4.9	10.87	**0.009**	**taller**
Wxw2	37.4 ± 12.43	34.7 ± 9.61	-2.7	6.37	0.170	

Table 10. The cross populations compared to their respective parent population for plant height in generation 0. The sxw cross populations are compared to both the spring parents and the winter parents.

Population	df	F	P
Cxc1	1	1.72	0.189
Cxc2	1	8.919	**0.003**
Sxs1	1	2.296	0.132
Sxs2	1	0.004	0.949
Wxw1	1	5.74	**0.018**
Wxw2	1	0.018	0.895
Sxw1 (spring parent)	1	1.86	0.482
Sxw2 (spring parent)	1	1.93	0.259
Sxw1 (winter parent)	1	2.872	0.337
Sxw2 (winter parent)	1	6.391	0.148

Table 11. The cross populations compared to their respective parent population for plant height in generation 3. The sxw cross populations are compared to both the spring parents and the winter parents.

Population	df	F	P
Cxc1	1	11.271	**0.001**
Cxc2	1	3.435	0.066
Sxs1	1	1.347	0.248
Sxs2	1	0.052	0.820
Wxw1	1	0.844	0.360
Wxw2	1	48.602	**0.000**
Sxw1 (spring parent)	1	3.65	0.324
Sxw2 (spring parent)	1	6.983	0.396
Sxw1 (winter parent)	1	2.468	0.153
Sxw2 (winter parent)	1	1.53	0.094

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6. Concluding discussion

The overall goal of this dissertation was to contribute to the greater understanding of how climate change impacts our ecosystems. To contribute to and advance the science that will hopefully make a difference in the way we strive to maintain and protect the natural resources that are vital to health of our planet. I completed four main experiments as outlined in the previous chapters which, although capable of standing alone as individual pieces of work, are linked by a common theme of examining the effects of a changing environment on plants and plant populations.

Early flowering as a result of increases in global temperature has been observed in many species. The first chapter of my dissertation looked at how selection for early flowering affects plant development and growth. Early flowering is a change in timing of the transition from one developmental phase to the next. This is important to study because changes in the timing of development have the potential to alter other aspects of the plant. How development is affected by changes in flowering time is not well known yet understanding the relationship between flowering time and vegetative growth would be useful for conservation and agriculture. I found that early-flowering plants had a slower rate of leaf initiation, less leaves and smaller rosettes.

It is well documented that many plants have experienced changes in phenological timing due to warmer temperatures, with many plant species flowering earlier (Fitter & Fitter 2002; Root *et al*. 2003; Parmesan 2006).This can be of concern to the success of populations of annual plants, because life-history trade-offs suggest that earlier transition to reproduction in annuals can cause reduction in reproductive output (Shitaka & Hirose 1998). It has also been shown in animals that increases in temperatures are causing a decline in body size (Atkinson & Sibly 1997; Gardner *et al*. 2011). It is possible that both plants and animals are adapting to changing climates by shifting their developmental strategy to transition to the reproductive stage at a smaller size. This has important conservation implications if this shift to smaller sizes results in a decrease in fitness or an inability to cope with predicted changes in climate.

Having enough variation to survive in stressful environments is essential to the long term maintenance of biodiversity. In chapter two, I described how I used MAGIC (multi parent advanced generation inter-cross) lines to understand how plant communities may respond to extreme drought events. Understanding how a population responds to water limitation is important as the global climate changes and the risk of extreme droughts increases. Increase in temperature which often is accompanied by drought has been shown to result in a decrease in fitness (Cherwin & Knapp 2012; Teixeira *et al*. 2013). I found that the majority of plants produced less fruits in a water-limited environment, however, there were some individuals that produced a greater number of fruits under water stress. In addition, it was observed that there is a strong selection to flower earlier under conditions of water limitation. This information increases our ability to predict how and if plants are capable of coping with extreme environmental conditions. This increased knowledge about an organism's ability to deal with extreme environmental conditions is important for conservation as it allows for the identification of potentially threatened species and highlights the need to maintain diversity.

Chapter five combined a selection experiment with a study of the effect of hybridization. There is a large body of research looking at these two topics separately but not many studies that address both. As genetic rescue becomes a more commonly used way to save populations suffering from a loss of genetic diversity it is crucial to fully understand how the newly created hybrid populations will respond to selective pressure. I have found that there is no clear predictor or rule to follow when determining which mix of populations will result in the healthiest individuals. This makes it difficult to advise conservation managers on best practice but identifies the need for more studies focused on hybrid plants and their ability to cope with environmental change. This study provides good baseline information on hybridization but as *A. thaliana* does not have any value to conservationists and has characteristics perhaps not found in threatened species, the next step in this research would be to attempt this study in a species of conservation importance. This would hopefully provide more insight on whether or not introducing new genes is an appropriate tool for conserving threatened populations.

Conservation genetics is a growing and exciting field of science. The experiments discussed in this dissertation are only a very small piece of the big picture of ecosystems and changing climates. It is essential to continue to use genetics to help answer questions in conservation and to use the information learned here to continue to move the field forward.

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Chapter 2: Primary data

	germ		21/10	22 /10	25/10	27/10	29/10	01/11	03/11	05/11	08/11	11/11	15/11	17/11	19/11	22/11	24/11	26/11	29/11	02/11	06/11	08/11	13/11	15/11	Final leaf	DFF	RD1	RD2
1283a s1	16-Oct	0	0	2	4	5	8																		8	2.11.10	4.0	4.3
1284a s1	15-Oct	0	2	4	4	5	9																		9	1.11.10	4.4	4.2
1284b s1	16-Oct	0	0	0	0	2	4	5	6	7															7	8.11.10	2.8	3.0
1284c s1	15-Oct	0	2	2	4	6	8	10	12	14															14	8.11.10	6.5	5.9
1285d s1	16-Oct	0	0	2	4	5	7																		7	2.11.10	3.5	2.9
1286a s1	16-Oct	0	2	2	4	5	7	9																	9	3.11.10	4.0	3.9
1286d s1	15-Oct	2	2	4	4	6	7																		7	1.11.10	4.9	4.8
1288a s1	16-Oct	0	2	4	4	5	8																		8	1.11.10	4.6	5.3
1288b s1	15-Oct	0	2	4	4	6	9																		9	2.11.10	4.6	4.3
1288c s1	16-Oct	0	0	2	4	5	8	8	11																11	5.11.10	5.9	6.4
1297a s1	16-Oct	0	0	2	4	4	6	7	9	12															12	8.11.10	9.0	9.2
1297d s1	16-Oct	0	0	2	4	5	7																		7	2.11.10	4.5	3.3
1298b s1	16-Oct	0	0	2	2	4	6	7																	7	3.11.10	2.3	2.2
1304a s1	16-Oct	0	0	2	4	5	9																		9	1.11.10	3.8	3.2
1304d s1	18-Oct	0	0	2	2	4	6	8	9	12	16														16	11.11.10 6.3	6.5	
1306a s1	16-Oct	0	0	2	2	4	5	6	9																9	5.11.10	3.6	4.4
1306b s1	16-Oct	0	2	2	4	5	7	10	11																11	5.11.10	4.7	4.5
1306c s1	16-Oct	0	0	2	2	4	6	7	9	12	17														17	11.11.10 6.6	6.0	

1306d s1	16-Oct0	0	2	2	3	5	6					6	3.11.10		2.1	2.3
1308d s1	16-Oct0	0	2	3	4	7	7	8				8	5.11.10		3.9	4.2
1317a s1	15-Oct0	0	2	2	4	6	7					7	3.11.10		3.4	3.3
1317c s1	15-Oct0	0	2	2	4	6	7	9				9	5.11.10		3.3	3.6
1317d s1	15-Oct0	0	2	3	5	8	9	10	11	15		15	11.11.10	7.4	7.4	
1318a s1	16-Oct0	0	2	3	4	5						5	2.11.10		2.6	3.5
1318b s1	15-Oct0	0	2	3	3	5						5	2.11.10		3.8	3.0
1318c s1	16-Oct0	0	2	2	4	5	6	8	11	13	18	18	15.11.10	6.1	6.6	
1321a s1	16-Oct0	0	2	4	5	6	7	9	11	12		12	11.11.10	5.4	5.2	
1321d s1	16-Oct0	0	2	3	3	6	7	9				9	5.11.10		2.7	2.7
1322d s1	16-Oct0	0	2	2	3	5	5	6	10			10	8.11.10		4.4	5.3
1330a s1	15-Oct0	0	2	2	4	5						5	2.11.10		2.3	2.4
1330b s1	16-Oct0	0	2	2	4	5	6	7	10			10	8.11.10		5.6	4.8
1330c s1	16-Oct0	0	2	3	4	6	7	7	11			11	8.11.10		5.3	5.1
1330d s1	16-Oct0	0	2	2	4	5	6					6	3.11.10		2.4	2.5
1340c s1	16-Oct0	0	2	2	3	5	6	8				8	5.11.10		2.8	3.0
1340d s1	16-Oct0	0	2	2	2	5	6	8	9	12		12	11.11.10	6.2	6.3	
1343a s1	15-Oct0	0	2	5	7	10	10	13				13	5.11.10		6.3	6.4
1343c s1	16-Oct0	0	2	4	5	8						8	2.11.10		3.3	3.4
1344a s1	15-Oct0	2	2	4	5	7	8	11				11	5.11.10		5.0	4.4
1344c s1	15-Oct0	2	2	5	7	11	11	14				14	5.11.10		5.5	5.8

1344d s1	15-Oct0	2	4	4	6	7				7	1.11.10	6.8	5.7
1351b s1	16-Oct0	0	2	3	4	6	7	9	12	12	8.11.10	5.7	4.2
1351c s1	15-Oct0	2	2	4	6	7				7	1.11.10	4.6	4.9
1354a s1	15-Oct0	0	2	4	5	8				8	2.11.10	3.9	3.1
1287c s2	16-Oct0	0	2	2	4	6	6	8		8	5.11.10	3.0	3.3
1287d s2	16-Oct0	0	2	4	5	7	8			8	3.11.10	3.3	2.9
1289a s2	16-Oct0	0	2	4	4	6	7	8	9	9	8.11.10	6.2	6.6
1289b s2	16-Oct0	0	2	2	2	5	6	8		8	5.11.10	3.0	3.3
1289d s2	16-Oct0	0	2	2	4	5	5	7		7	5.11.10	2.9	3.0
1290a s2	16-Oct0	0	2	2	4	5	7	7	12	12	8.11.10	3.2	3.8
1290b s2	16-Oct0	0	2	4	5	6	8			8	3.11.10	3.4	3.6
1291a s2	15-Oct0	0	2	3	4	6	8	9		9	5.11.10	3.8	3.5
1291c s2	15-Oct0	0	2	3	5	6				6	1.11.10	3.0	3.6
1294b s2	16-Oct0	0	2	3	4	6	6			6	3.11.10	3.7	3.4
1294d s2	16-Oct0	0	2	4	4	6				6	1.11.10	3.9	3.3
1302a s2	15-Oct0	2	4	4	6	9	9	12	16	16	8.11.10	9.0	9.2
1302b s2	16-Oct0	0	2	4	5	8				8	1.11.10	4.5	4.5
1302c s2	16-Oct0	0	2	4	5	8				8	1.11.10	3.9	4.3
1302d s2	15-Oct0	2	2	4	6	7				7	1.11.10	4.5	5.2
1303b s2	16-Oct0	2	4	5	5	9	9			9	3.11.10	4.2	4.8
1303c s2	15-Oct0	2	4	5	7	8				8	1.11.10	5.3	4.7

1303d s2	14-Oct	0	2	4	5	6	9			9	1.11.10	3.9	3.7
1305a s2	16-Oct	0	0	2	3	4	6	8		8	3.11.10	3.4	3.7
1305b s2	16-Oct	0	0	2	4	5	8			8	1.11.10	4.5	4.7
1305c s2	16-Oct	0	0	2	4	4	7			7	1.11.10	2.7	3.4
1305d s2	15-Oct	0	2	4	4	6	6			6	1.11.10	3.9	4.6
1307b s2	16-Oct	0	0	2	4	4	6			6	1.11.10	3.6	4.6
1307c s2	15-Oct	0	2	4	4	6	6			6	1.11.10	5.4	4.7
1315a s2	16-Oct	0	2	2	4	4	6			6	2.11.10	2.9	2.6
1315c s2	15-Oct	0	0	2	4	4	7	8	10	10	5.11.10	3.2	3.8
1315d s2	15-Oct	2	2	4	4	6	7			7	1.11.10	4.7	5.2
1316c s2	15-Oct	0	2	2	4	5	7			7	1.11.10	3.9	4.8
1323c s2	16-Oct	2	2	4	4	6	6			6	1.11.10	4.7	4.4
1324a s2	14-Oct	0	2	4	4	7	8			8	1.11.10	4.8	5.0
1326b s2	15-Oct	0	2	4	4	5	7			7	1.11.10	3.6	3.5
1328a s2	14-Oct	2	2	4	6	8	8			8	1.11.10	7.5	8.4
1328b s2	15-Oct	0	2	4	4	6	8			8	1.11.10	3.4	3.4
1331d s2	14-Oct	0	2	2	4	5	8			8	1.11.10	3.6	3.8
1338b s2	16-Oct	0	2	2	3	5	5			5	1.11.10	3.9	3.4
1338c s2	16-Oct	0	0	2	2	4	6			6	1.11.10	2.8	3.4
1339b s2	16-Oct	0	0	2	3	4	6			6	1.11.10	2.7	3.1
1346a s2	16-Oct	0	1	2	4	5	8	10	11	11	5.11.10	5.1	5.2

1346c s2	15-Oct	2	2	4	4	6	6							6	1.11.10	4.7	3.9
1347a s2	15-Oct	2	2	4	5	6	8							8	1.11.10	4.4	3.3
1347b s2	16-Oct	2	2	4	6	8	11	13	17					17	5.11.10	6.5	6.7
1348b s2	14-Oct	2	2	4	5	7	7							7	1.11.10	4.9	4.3
1348d s2	19-Oct	0	2	2	2	4	5	6						6	3.11.10	3.5	3.7
1361b s2	15-Oct	0	2	2	5	6	6							6	1.11.10	5.8	6.0
1292b s3	15-Oct	0	2	4	5	6	8							8	2.11.10	4.0	3.9
1293b s3	16-Oct	0	0	2	4	5	6							6	1.11.10	3.7	4.0
1293c s3	16-Oct	0	0	2	4	4	5							5	1.11.10	4.9	4.0
1296a s3	16-Oct	0	0	2	3	4	7	8	10	13	17	22	24	24	17.11.10 8.4	8.6	
1296c s3	16-Oct	0	0	2	2	4	6							6	2.11.10	2.6	2.9
1300a s3	15-Oct	0	2	4	4	5	9	9						9	3.11.10	5.3	4.9
1300d s3	15-Oct	0	2	4	5	5	8	10	11	13				13	8.11.10	8.6	7.8
1301a s3	15-Oct	0	2	4	4	6	9							9	1.11.10	3.7	3.7
1301d s3	15-Oct	0	0	2	2	4	6							6	2.11.10	2.9	2.5
1310a s3	15-Oct	0	2	4	4	6	8							8	2.11.10	4.0	3.6
1310c s3	15-Oct	0	0	2	4	5	6	7	9					9	5.11.10	2.4	2.5
1310d s3	15-Oct	0	0	2	4	5	7							7	1.11.10	2.4	2.2
1311a s3	16-Oct	0	0	2	3	5	6	7	9					9	5.11.10	3.9	3.7
1311b s3	16-Oct	0	0	2	3	4	7	7	10					10	5.11.10	4.2	4.7
1313a s3	15-Oct	0	0	2	3	4	5	6	8					8	5.11.10	5.6	4.8

1313c s3	16-Oct0	0	2	2	3	5	6	8	10		10	8.11.10	4.2	4.5
1313d s3	16-Oct0	0	2	2	3	5	5				5	3.11.10	2.2	2.7
1319d s3	16-Oct0	0	2	4	4	7	8	9	10	15	15	11.11.10 6.5	6.5	
1320a s3	15-Oct0	0	2	4	5	7	8				8	3.11.10	2.9	2.7
1325d s3	15-Oct0	2	4	5	6	10	11	12			12	5.11.10	5.9	6.1
1327a s3	15-Oct0	2	4	5	7	9					9	1.11.10	4.8	4.7
1329a s3	16-Oct0	0	2	4	5	8					8	2.11.10	3.4	3.2
1329b s3	16-Oct0	0	2	4	5	7	8				8	3.11.10	3.8	3.7
1329c s3	18-Oct0	0	2	2	4	6					6	2.11.10	3.5	3.0
1332a s3	15-Oct0	0	2	4	5	7					7	1.11.10	3.8	3.9
1332c s3	14-Oct0	0	2	4	5	7					7	2.11.10	3.5	3.9
1332d s3	15-Oct0	0	2	3	4	6	6				6	3.11.10	2.6	2.9
1333a s3	15-Oct0	0	2	4	5	9					9	2.11.10	3.6	3.4
1333b s3	15-Oct0	0	2	4	5	8	9	11	14		14	8.11.10	5.8	5.6
1333c s3	15-Oct0	2	2	4	5	8	9	11	14		14	8.11.10	6.4	6.3
1333d s3	16-Oct0	0	2	2	4	7	7	9	12		12	8.11.10	5.3	5.7
1334d s3	15-Oct0	0	2	4	5	6	7	9			9	5.11.10	4.3	4.0
1336b s3	15-Oct0	0	2	3	5	8					8	2.11.10	4.0	3.6
1336d s3	16-Oct0	0	2	4	4	5					5	1.11.10	3.5	3.5
1352b s3	15-Oct0	0	2	2	4	6	7	9			9	5.11.10	3.4	3.2
1353a s3	15-Oct0	2	2	4	6	7					7	1.11.10	3.7	4.0

1355a s3	15-Oct0	2	2	4	4	7	8	9											9	5.11.10	3.8	3.7
1355d s3	15-Oct0	0	2	2	4	6	8	10	11	16									16	11.11.10 6.5	6.5	
1356a s3	16-Oct0	0	2	4	5	7	7	9											9	5.11.10	3.5	3.2
1356b s3	15-Oct0	0	2	4	4	7	8	9											9	5.11.10	4.1	3.8
1356d s3	16-Oct0	0	2	3	4	6	7	9	11	13									13	11.11.10 3.0	2.8	
1358b s3	16-Oct0	0	2	3	4	6	6	9											9	5.11.10	4.2	4.4
1364a s3	16-Oct0	0	2	2	4	6	7	9											9	5.11.10	3.6	3.9
1364b s3	15-Oct0	0	2	4	5	7													7	2.11.10	3.7	4.4
1364c s3	16-Oct0	0	2	3	4	5	7	9											9	5.11.10	3.4	3.2
1490c w1	15-Oct0	0	2	3	5	7	9	11	14	20	24	30	32	39	44	47	56		56	29.11.10 9.9	10.2	
1444a w1	15-Oct0	2	2	4	5	8	8	9	13	17	20	26	27	27	30				30	24.11.10 8.7	9.2	
1444b w1	15-Oct0	2	2	4	5	9	12	15											15	5.11.10	5.8	6.4
1444c w1	15-Oct0	2	3	4	5	9	10	11	14	18	25	28	29	33	38	40	45	47	47	2.12.10	11.4	10.3
1444d w1	15-Oct0	2	2	4	5	9	11	12	13	14									14	11.11.10 8.0	7.6	
1446a w1	15-Oct0	2	2	4	6	9	10	11											11	5.11.10	6.0	6.5
1446c w1	15-Oct0	2	2	4	6	8	10	11	12										12	8.11.10	9.4	8.4
1448a w1	15-Oct0	0	2	2	4	6													6	1.11.10	2.7	2.2
1448b w1	15-Oct0	2	2	4	5	7	7	10	11										11	8.11.10	5.0	5.4
1451b w1	14-Oct2	2	2	4	6	9													9	1.11.10	4.6	5.1

1451c w1	16-Oct0	2	2	4	5	8	9	11												11	5.11.10	4.8	4.9
1451d w1	15-Oct0	0	2	2	4	7	8	9	12											12	11.11.10	8.3	8.5
1455a w1	15-Oct0	2	2	4	5	9	12	12	15	20	26	32	39							39	19.11.10	9.2	10.1
1455c w1	15-Oct0	2	2	4	5	8	9	10	12	13	16	19	21	24	27	28	29	33	40	40	6.12.10	8.6	8.9
1460d w1	15-Oct0	2	2	4	5	8	9	10	12	15										15	11.11.10	6.5	6.6
1462d w1	14-Oct0	2	3	4	5	8	10	10	13											13	8.11.10	7.1	7.5
1463a w1	15-Oct0	0	2	4	4	8														8	1.11.10	3.5	3.7
1463b w1	15-Oct0	0	2	4	4	7														7	2.11.10	2.9	2.7
1463c w1	15-Oct0	2	4	4	6	9	10	11												11	5.11.10	6.0	5.1
1464c w1	15-Oct0	2	2	4	4	7	9	10	12	17	21									21	15.11.10	8.5	9.0
1465b w1	15-Oct0	0	2	3	4	6	7	7	9	11										11	11.11.10	5.6	5.1
1465c w1	15-Oct0	2	3	4	5	8	9	11												11	5.11.10	5.2	5.3
1465d w1	16-Oct0	0	2	2	4	6	8	9	11	16	20	23	25							25	19.11.10	8.6	8.5
1469d w1	16-Oct0	0	2	3	4	6	7	9	10	12	16	21	23	25	27	30				30	26.11.10	8.0	8.1
1471a w1	22-Oct0	0	0	2	2	4	5	6	9	12										12	11.11.10	5.5	5.1
1471c w1	16-Oct0	0	2	3	4	7	7	9												9	5.11.10	4.4	4.1
1474b w1	15-Oct0	2	2	4	4	7	8	10												10	5.11.10	4.4	4.5
1474c w1	16-Oct0	0	2	2	2	5	5	6	8	12										12	11.11.10	4.8	5.2
1474d w1	16-Oct0	0	2	4	5	8	9	10	13	15										15	11.11.10	7.5	7.4
1475c w1	15-Oct0	0	2	3	4	6	9	9												9	5.11.10	4.5	4.7
1487a w1	16-Oct0	0	2	3	5	8	8	10	12	14	15									15	15.11.10	7.2	7.0

1487b w1	15-Oct0	2	2	3	4	7	8	9	12	16					16	11.11.10	7.3	7.1	
1487c w1	15-Oct0	0	2	4	5	7	9	10	13	16					16	11.11.10	7.6	7.0	
1487d w1	16-Oct0	2	2	4	4	7	10	12	13	15	22				22	15.11.10	7.4	7.2	
1489a w1	15-Oct0	0	2	2	4	6	6	8	11	12	16				16	15.11.10	8.5	8.2	
1489d w1	15-Oct0	0	2	4	4	7	9	11	13	16					16	11.11.10	6.7	7.7	
1490a w1	15-Oct0	0	2	3	4	8	9	11	15	22					22	11.11.10	8.0	6.9	
1491a w1	16-Oct0	0	2	2	4	6	7	8	11						11	8.11.10		4.5	4.8
1494a w1	14-Oct0	0	2	4	4	7	7								7	3.11.10		3.7	4.6
1494c w1	15-Oct0	0	0	0	1	3	4	4	5	7	8	9	10	14	14	22.11.10	3.8	3.6	
1445a w2	15-Oct0	2	2	4	5	7	8	9	12	13	14				14	15.11.10	6.7	6.4	
1445b w2	15-Oct0	0	2	2	5	6	7	8	11	15	19				19	15.11.10	8.0	7.6	
1445c w2	14-Oct0	0	2	4	4	6	7	9							9	5.11.10		3.4	3.5
1445d w2	16-Oct0	2	4	3	4	6	7	8	10	12					12	11.11.10	7.1	6.9	
1449a w2	15-Oct0	0	2	3	4	6	7	8	10						10	8.11.10		4.6	5.0
1449d w2	15-Oct0	2	2	2	4	5									5	1.11.10		4.5	4.0
1450b w2	16-Oct0	0	2	2	4	5	7								7	3.11.10		3.1	2.7
1450c w2	16-Oct0	0	4	2	4	5									5	2.11.10		2.4	2.5
1450d w2	16-Oct0	0	2	2	3	4	5	6	8						8	8.11.10		3.5	4.0
1452a w2	15-Oct0	0	2	2	3	5	6	7	10						10	8.11.10		4.6	4.3
1452b w2	15-Oct0	0	2	4	5	9	11	11	14						14	8.11.10		5.2	5.4
1452c w2	15-Oct0	0	2	3	4	7	8	11							11	5.11.10		4.0	4.4

1453c w2	15-Oct0	0	2	3	4	7	7	9					9	5.11.10		3.2	3.0
1453d w2	15-Oct0	0	1	1	3	5	6	9					9	5.11.10		3.3	2.9
1454a w2	16-Oct0	0	2	2	4	5	7	8	10	14			14	11.11.10	6.0	6.8	
1454b w2	16-Oct0	0	2	4	4	8	8	10	11	15			15	11.11.10	7.4	7.5	
1454c w2	15-Oct0	0	2	4	5	9	9	10	15				15	8.11.10		7.7	8.3
1454d w2	15-Oct0	0	2	4	5	9	10	10	13	20			20	11.11.10	7.2	7.7	
1466b w2	15-Oct0	2	2	3	4	6							6	1.11.10		3.6	4.4
1466d w2	14-Oct0	2	3	4	6	8							8	1.11.10		5.1	4.9
1470a w2	15-Oct0	2	2	4	5	8	8						8	3.11.10		3.8	3.7
1472a w2	15-Oct0	0	0	0	2	4	5	6	8	12	16	19	19	17.11.10	7.6	7.8	
1472b w2	15-Oct0	2	2	4	5	7	8	8	12	14			14	11.11.10	8.1	7.9	
1472c w2	15-Oct0	0	2	4	5	8	9	10	14				14	8.11.10		5.3	5.5
1476a w2	16-Oct0	0	2	4	4	7	9	10	10				10	8.11.10		6.9	6.3
1476b w2	15-Oct0	0	2	3	4	7	8						8	3.11.10		3.4	2.9
1476c w2	15-Oct0	0	2	4	5	7	9	11					11	5.11.10		4.2	4.6
1484b w2	14-Oct0	2	4	4	5	8	9	10	12	13			13	11.11.10	8.2	7.4	
1484c w2	15-Oct0	0	2	3	5	6	7	9					9	5.11.10		3.8	4.0
1496d w2	15-Oct0	0	2	2	4	6	7	9	11	15			15	11.11.10	7.9	8.0	
1498a w2	14-Oct0	2	2	2	4	7	8	9	11				11	8.11.10		5.5	6.0
1498d w2	15-Oct0	0	0	1	2	4	5	7	9	12	16		16	15.11.10	7.6	7.2	
1500a w2	15-Oct0	2	2	4	5	7	9	10	13	18	22		22	15.11.10	8.2	8.0	

1500b w2	15-Oct	0	2	2	4	5	7	9	10	13	16					16	11.11.10	9.9	10.0	
1500c w2	15-Oct	0	0	2	3	4	7	9	9	13	17	23	30	35		35	19.11.10	11.0	11.8	
1502b w2	15-Oct	0	2	4	4	5	8	9								9	3.11.10		4.5	4.3
1503a w2	16-Oct	0	0	2	2	3	4	5	6							6	5.11.10		3.0	2.2
1503c w2	15-Oct	0	0	2	4	4	7	9	9	13	17					17	11.11.10	7.9	8.3	
1503d w2	16-Oct	0	0	2	2	3	5	5	6	7	8					8	11.11.10	4.2	4.3	
1518b w2	15-Oct	0	0	2	3	5	7	9	9	13	14					14	11.11.10	7.3	6.2	
1519a w2	15-Oct	0	2	2	4	5	7									7	2.11.10		3.6	4.1
1519b w2	15-Oct	0	2	2	4	4	6	8								8	3.11.10		4.1	3.6
1519c w2	15-Oct	0	0	2	4	6	8	10								10	3.11.10		4.0	3.9
1519d w2	15-Oct	0	0	2	3	4	7	8	10	12	16					16	11.11.10	7.8	8.3	
1456c w3	15-Oct	0	2	2	4	5	8	9	12	13	19					19	11.11.10	9.5	9.1	
1456d w3	15-Oct	0	2	2	3	5	6	8	11							11	5.11.10		5.4	4.6
1457b w3	15-Oct	0	0	2	5	5	8	9	11	16	20	28	32			32	17.11.10	10.1	9.8	
1457d w3	16-Oct	0	0	2	2	4	6	7	10	12	17					17	11.11.10	8.6	8.0	
1459a w3	16-Oct	0	0	2	2	4	6	8	9	11	15	19	23	25	30	30	22.11.10	8.4	7.6	
1467c w3	16-Oct	0	0	2	4	5	7	8	10	12	15					15	11.11.10	8.1	9.0	
1477a w3	15-Oct	0	2	2	4	5	9	9	10	14						14	8.11.10		6.4	6.7
1478c w3	15-Oct	0	0	2	4	5	8	9	11	12						12	8.11.10		4.8	5.3
1479b w3	15-Oct	0	0	2	3	5	7	9	11							11	5.11.10		5.8	5.2
1480a w3	15-Oct	0	0	2	4	5	7									7	2.11.10		2.9	3.0

1481a w3	14-Oct0	0	2	4	5	7															7	2.11.10	4.1	3.6
1482c w3	15-Oct0	0	2	4	5	7	9	11	12												12	8.11.10	5.8	5.6
1482d w3	15-Oct0	0	2	4	4	7	7	10													10	5.11.10	5.3	6.1
1483a w3	15-Oct0	0	2	3	5	6	7	10	11	15	18	20	23								23	19.11.10 6.6	7.0	
1483b w3	15-Oct0	0	2	4	5	7	8	11	13	17											17	11.11.10 7.4	7.5	
1483c w3	16-Oct0	0	2	4	5	7	8														8	3.11.10	3.6	4.2
1486b w3	16-Oct0	0	2	4	4	6															6	1.11.10	3.6	3.9
1486d w3	15-Oct0	0	2	4	5	6	9	9	12	15											15	11.11.10 5.8	7.1	
1504b w3	15-Oct0	2	2	4	5	6															6	1.11.10	3.6	3.5
1506d w3	16-Oct0	0	2	4	5	7	9	11	14	19	24	28	29	32	33	36	42	44	49	52	52	8.12.10	7.9	7.6
1507a w3	16-Oct0	0	2	2	4	5	5	6	8												8	8.11.10	3.2	2.8
1508c w3	16-Oct0	0	2	2	4	5	7	8	11	14	18	21									21	17.11.10 7.2	7.3	
1508d w3	16-Oct0	0	2	2	2	4	6	7	10	13	19										19	15.11.10 6.4	6.7	
1509b w3	16-Oct0	0	2	2	4	6	7	9	12												12	8.11.10	4.6	4.2
1509c w3	16-Oct0	0	2	2	3	5	7	9	10	16											16	11.11.10 5.2	5.6	
1511c w3	15-Oct0	0	2	2	4	5	7	8													8	5.11.10	3.9	4.4
1512a w3	15-Oct0	0	2	2	4	5	6	7	8	12											12	11.11.10 5.4	5.2	
1512c w3	16-Oct0	0	2	2	4	6	6	8	10	14											14	11.11.10 7.0	6.8	
1512d w3	16-Oct0	0	2	2	3	5	6	8	9												9	8.11.10	4.8	4.7
1513a w3	16-Oct0	0	2	2	4	5	7	9													9	5.11.10	3.7	3.9
1513b w3	16-Oct0	0	2	2	4	5	6	7	8	12											12	11.11.10 5.2	4.9	

1513c w3	16-Oct	0	0	2	2	4	6	7	9	11	14	18		18	15.11.10	7.2	7.7	
1513d w3	16-Oct	0	0	2	2	3	5	6	8					8	5.11.10		3.7	3.4
1514a w3	15-Oct	0	0	2	3	5	6	8	8	12				12	8.11.10		3.9	3.5
1514b w3	15-Oct	0	0	2	3	4	6							6	2.11.10		2.9	2.4
1514c w3	16-Oct	0	0	2	2	3	5	6	7	11				11	8.11.10		4.3	4.2
1514d w3	16-Oct	0	0	2	2	4	6	8	9	12				12	8.11.10		3.9	4.2
1515a w3	16-Oct	0	0	2	2	4	5	6	8					8	5.11.10		3.2	3.4
1515c w3	16-Oct	0	0	2	2	3	4	5	6					6	5.11.10		2.9	2.6
1515d w3	16-Oct	0	0	2	2	3	5	6						6	3.11.10		2.6	2.5
1520a w3	15-Oct	0	0	2	4	5	7	10	11	14				14	8.11.10		6.7	6.5
1520c w3	15-Oct	0	0	2	3	4	6	8	9	13				13	8.11.10		5.2	4.7
1520d w3	15-Oct	0	0	2	2	5	7	9	9	14				14	8.11.10		5.9	6.7
1521c w3	15-Oct	0	0	2	3	4	6	7	8	11	14	18	21	21	17.11.10	7.9	6.9	
1525b w3	15-Oct	0	2	2	4	5	7	9	11					11	5.11.10		5.3	5.2
1525d w3	15-Oct	0	0	2	4	5	6	8	9	12				12	8.11.10		5.1	4.8
1341c c3	18-Oct	0	0	2	4	5	7	8						8	3.11.10		3.2	3.0
1342d c2	14-Oct	2	2	4	5	7	10	15						15	5.11.10		6.0	5.8
1350b c1	15-Oct	0	2	4	5	6	9	10	11					11	5.11.10		6.0	5.9
1359d c3	15-Oct	0	0	2	3	5	7	8	9	15				15	8.11.10		5.6	6.1

1362b c1	14-Oct	0	2	2	5	6	9	11	12	16													16	8.11.10	6.7	7.0
1363b c1	18-Oct	0	0	2	3	4	7	9	10	13													13	8.11.10	7.2	7.6
1363d c1	15-Oct	0	2	4	4	6	8	11	11														11	5.11.10	6.9	5.4
1365a c1	15-Oct	0	0	2	4	5	8	9	11														11	5.11.10	5.2	4.9
1366a c3	15-Oct	0	2	2	4	5	8	9	11	13	15	19	20	22	26	27	32	41	45	50	54	55	55	13.12.10	9.0	9.6
1366b c3	15-Oct	0	0	2	4	5	7	8	11	14	15	20	24	29	35	36	38	41					41	29.11.10	7.0	7.2
1366c c3	15-Oct	0	0	2	3	5	8	9	10	14	18	24											24	8.11.10	6.9	6.8
1366d c3	15-Oct	0	0	2	3	5	7	9	10	12	16												16	11.11.10	10.1	9.1
1368a c3	16-Oct	0	0	2	3	4	6	7	8	11	15	17	21	24	30	30	32	39					39	29.11.10	7.9	8.2
1369b c1	14-Oct	0	0	2	4	5	8	10	11	15	20												20	11.11.10	9.1	7.7
1369c c1	15-Oct	0	0	2	4	5	8	10															10	3.11.10	3.3	3.4
1370b c3	15-Oct	0	2	2	3	4	7	9	9	14	17	22											22	15.11.10	8.8	9.0
1371b c3	16-Oct	0	0	2	3	5	6	7	9	11	14	18											18	15.11.10	7.4	7.9
1371d c3	16-Oct	0	0	2	4	5	7	8	10	12	15	19	22	24	30	32	35	36					36	29.11.10	10.1	10.4
1372a c3	15-Oct	0	0	2	3	5	8	9	11	14	18	24	30	31	39								39	22.11.10	9.0	8.9
1372c c3	16-Oct	0	0	2	4	5	8	9	11	14													14	8.11.10	5.7	6.0
1373d c1	16-Oct	0	0	2	4	5	8	9	10	13	13	18	20										20	17.11.10	4.7	5.0
1374a c2	18-Oct	0	0	2	3	4	7	8	10	11	15	18	19	19	22	24	25						25	26.11.10	7.7	7.6
1374b c2	15-Oct	0	0	2	3	5	8	9	10	13	17												17	11.11.10	8.1	8.0
1374c c2	15-Oct	0	2	2	4	5	8	10	11	13	19	24	27	30	34	41							41	24.11.10	8.6	8.3
1375a c1	16-Oct	0	0	2	2	4	6	8	9	11	13												13	11.11.10	6.0	5.3

1376b c1	15-Oct	0	0	0	2	2	5	6	7	9	12	18								18	15.11.10	5.6	5.5	
1376d c1	15-Oct	0	0	2	4	5	9	10	12	14	20	22								22	15.11.10	5.5	5.7	
1377a c3	15-Oct	0	0	2	2	4	6	8	9	14										14	8.11.10		5.7	5.8
1377b c3	15-Oct	0	2	2	4	5	8	8	9	14	19	23	28	28	33	35	41			41	26.11.10	11.0	10.8	
1377d c3	16-Oct	0	0	2	2	5	5	7	9											9	5.11.10		4.5	4.4
1378a c3	16-Oct	0	0	2	4	5	7	9	10	14	18	25	28	29	33	39	43			43	26.11.10	10.8	10.0	
1378b c3	14-Oct	2	2	4	4	6	9	10	11	14	18	26	27	30	36	38	42	44		44	29.11.10	7.6	7.2	
1378d c3	15-Oct	0	2	4	4	6	10	10	11	14	16	25	26	27	33	34	40	44	46	46	2.12.10		8.6	7.8
1379b c1	18-Oct	0	0	2	3	4	6	8	9	11	14	23	24	27	28					28	24.11.10	5.8	5.2	
1379d c1	18-Oct	0	0	0	2	2	5	6	7	9	13	20	21	21	24	25	27			27	26.11.10	6.6	6.3	
1380b c1	18-Oct	0	0	2	3	4	7	9	11	14	19	28	30	31	39	46	54			54	26.11.10	6.6	6.5	
1381b c2	16-Oct	0	0	2	2	4	6	7	8	10	12									12	11.11.10	6.9	6.3	
1381c c2	18-Oct	0	0	2	4	4	7	8	9	12										12	8.11.10		5.7	6.4
1382a c2	15-Oct	0	0	2	3	4	6	7	9	10	12	21	22	22	23	24	28	28	33	33	2.12.10		6.2	5.7
1382c c2	18-Oct	0	0	2	2	3	4	6	8	9	12	15	17	18	19					19	22.11.10	8.8	8.5	
1382d c2	16-Oct	0	0	2	3	4	6	7	8	9	12									12	11.11.10	5.1	5.0	
1383a c3	16-Oct	0	0	2	2	4	6	7	8	11	15	20	21	23	26	27	30	41		41	29.11.10	6.8	7.4	
1383c c3	16-Oct	0	0	2	3	4	7	8	10	14	18	22	24	25						25	19.11.10	5.7	5.6	
1383d c3	15-Oct	0	0	2	4	6	8	9	10	14	19	24	25	27	31					31	22.11.10	8.6	9.1	
1384a c1	20-Oct	0	0	0	0	2	2	4	5	6	8	12	14	17						17	19.11.10	5.0	4.9	
1384b c1	18-Oct	0	0	0	2	2	4	5	5	7	10	14	16	18	22	25				25	24.11.10	7.2	7.1	

1384c c1	18-Oct	0	0	2	2	3	5	7	9	13	17	22	24	24											24	19.11.10	6.6	7.2	
1385a c2	15-Oct	0	0	2	2	5	6	6	7	10	12	21													21	15.11.10	8.0	7.5	
1385b c2	15-Oct	0	0	2	3	4	6	7	10	12	17	20	21	23	25	26	26	28	32	38	39	42	44	45					
1385d c2	15-Oct	0	0	2	2	4	6	7	8	10	15	19													19	15.11.10	7.4	7.2	
1386d c1	16-Oct	0	0	2	3	4	6	7	8																8	5.11.10		3.8	3.2
1387b c2	15-Oct	0	0	2	3	5	7	9	11	14	18	23	25	25	29	31	34								34	26.11.10	8.1	9.0	
1387c c2	16-Oct	0	0	2	2	4	6	7	9	10	15	21	26	27	29	33									33	24.11.10	8.7	9.0	
1388a c2	16-Oct	0	0	2	2	4	6	7	9	11	15	21	23	25	30	32	34	40	42	51					51	6.12.10		9.4	8.9
1388b c2	16-Oct	0	0	2	3	4	6	8	9	12	14	16	17	18	19	22	25	27	29	33	35	37	38	40					
1389a c2	16-Oct	0	0	2	2	3	5	6	8	12	16	18	19	21	22	22	24	27	29	34	37	40	43	45					
1389b c2	15-Oct	0	0	2	3	4	7	8	10	11	16	20	24	26	27	31	34	34	36	41	44	46	47	50					
1389c c2	16-Oct	0	0	2	2	4	5	6	7	9	12	18	20	21	26	30	34								34	26.11.10	7.5	6.3	
1390b c2	16-Oct	0	0	2	4	4	6	8	10	13	18	25	27												27	17.11.10	8.8	8.7	
1390c c2	15-Oct	0	0	2	4	4	7	8	10	13	17	20													20	15.11.10	5.9	6.4	
1390d c2	15-Oct	0	0	2	2	5	7	9	10	14	17	23	26	26	29	30	31	40							40	29.11.10	5.3	5.1	
1391d c3	16-Oct	0	0	2	4	5	7	9	10	12	15	20	21	24	31	32	34	40	42	49	52	54	56	59					
1392c c1	16-Oct	0	0	2	2	5	6	8	10	12	17	22	26	28	31	36	38	39	43	50	52				52	8.12.10		6.0	5.7
1392d c1	15-Oct	0	0	2	3	5	7	9	11	13	19	22	25	29	32	33	38								38	26.11.10	7.0	6.4	
1393b c2	15-Oct	0	0	2	2	4	6	8	9	12	16	20	22	24	28	29	31								31	26.11.10	7.4	7.6	
1393d c2	15-Oct	0	0	2	2	4	6	7	8	11	15	18													18	15.11.10	6.9	6.6	
1395b c2	15-Oct	0	0	2	4	4	7	9	10	14	16	22	25	27	35	36	40	43	46	52	56	60	64	66					

1396a c3	15-Oct	0	2	2	4	5	9	10	12	14	19	20	26	27	29	33	36	40	38	48	52	52	54	54					
1397a c3	15-Oct	2	2	4	4	5	9	10	11	14	18	22													22	15.11.10	9.1	9.2	
1397c c3	15-Oct	0	2	2	4	6	9	9	11	16	18														18	11.11.10	9.6	9.2	
1399d c2	15-Oct	0	0	2	2	4	7	9	9	12	17	24	26	27	35	40	45								45	26.11.10	6.5	6.6	
1400a c1	16-Oct	0	0	2	2	4	6	6	8	11	14	19													19	15.11.10	6.0	5.4	
1401c c3	15-Oct	0	2	4	5	6	9	10	12	16	20	24	25	29	34	35	38	41							41	29.11.10	6.0	6.2	
1401d c3	15-Oct	0	2	2	4	5	8	11	14	19	22														22	11.11.10	8.6	8.8	
1402c c3	16-Oct	0	0	2	4	5	7	10	11	15	20	27	30	32	36	41	46	51							51	29.11.10	8.0	8.6	
1403a c3	15-Oct	0	0	2	2	4	6	7	9	9	15	20	23	25	36										36	22.11.10	9.4	9.8	
1403b c3	16-Oct	0	0	2	5	5	7	10	11	15	17	20													20	15.11.10	6.1	5.6	
1404d c1	16-Oct	0	0	2	2	3	5	6	6	9	14	17	19	21											21	19.11.10	5.1	4.9	
1405c c2	14-Oct	0	2	2	4	5	7	8	10	11	14	16	17	19											19	19.11.10	6.4	6.1	
1406a c2	16-Oct	0	0	2	4	5	7	8	11	14	18	19	20	20	24	27	27	28	28	36	38	39	41	44					
1407c c2	15-Oct	0	2	2	4	5	9	9	11	15	18	26	28	28	35	37	43	43	47	52	57				57	8.12.10		8.8	9.3
1409c c1	15-Oct	0	0	2	3	4	6	7	9	11	14	16	17	18	20	21	24	28	29	37					37	6.12.10		5.7	5.5
1409d c1	16-Oct	0	2	2	3	4	6	6	8	11	15	19													19	15.11.10	9.1	8.1	
1410a c3	14-Oct	0	2	2	4	6	9	10	10	12	18	20	23	24	25	25	25	29	29	34	36	38	40		40	15.12.10	8.9	8.6	
1410b c3	15-Oct	0	2	2	4	5	8	9	11	15	19														19	11.11.10	5.8	6.0	
1410d c3	15-Oct	0	0	2	4	5	7	9	11	14	17	24	28	30	33	39									39	24.11.10	6.1	6.4	
1411b c2	15-Oct	0	0	4	4	6	7	10	10	15	19	23	24	26	31	34	34	35							35	29.11.10	6.5	6.6	
1411d c2	15-Oct	0	0	2	4	6	8	9	11	13	19	24	28	28	35	41	44	46	52	64	66	68			68	13.12.10	6.0	5.7	

1412b c1	15-Oct0	0	2	3	5	9	9	12	15	22	27	32	33	39	44	45	49	54	56	62	63	64		64	15.12.10 7.4	7.2	
1413a c1	16-Oct0	0	2	2	3	7	7	9	13	14	18	20	20	28										28	22.11.10 6.6	6.6	
1413b c1	16-Oct0	0	0	2	2	4	5	7	9	13	20	25	26	30	36	40	45	48	58	60	64	66	72				
1413c c1	15-Oct0	2	2	4	5	8	10	11	14	17	22	22	25	28	30	34	38	38	43	44	45	45	46				
1414d c2	22-Oct0	0	0	0	2	4	4	6	8	12	17	19	19	24	25	28	31	34	41					41	6.12.10	5.8	5.3
1419a c2	15-Oct0	2	2	4	5	9	10	11	14	16	19	22	24	28	29	31	34	37	41	44	46	47		47	15.12.10 6.5	6.8	
1419d c2	15-Oct0	2	4	4	6	9	10	12	15	20	26	30	32	35	36	40	45							45	29.11.10 7.4	7.2	
1421a c3	16-Oct0	0	2	4	5	8	9	11	13	17	21	23	24	31	32	34	37	40						40	2.12.10	9.4	8.8
1421b c3	14-Oct0	2	2	4	5	8	8	10	14	17	19	23	24	28	31	31	37	38	44	46	47	49	50				
1421d c3	16-Oct0	0	2	4	5	7	9	11	14	18	23	26	30	35										35	22.11.10 9.7	9.5	
1422a c3	15-Oct0	2	4	4	5	8	9	11	16	18	24	26	30	42										42	22.11.10 6.2	6.7	
1422b c3	15-Oct0	2	2	4	5	7	10	10	11	14	16	17	17	20	20	21	25	30	34					34	6.12.10	5.2	5.4
1422c c3	15-Oct0	0	2	4	5	7	10	12	14	21	25	29	31	37	43	44								44	26.11.10 8.4	8.1	
1423a c1	15-Oct0	0	2	3	5	7	9	10	13															13	8.11.10	5.2	4.7
1423c c1	16-Oct0	0	2	3	5	7	8	10	13	16	20	23												23	17.11.10 5.3	5.1	
1423d c1	15-Oct0	0	2	3	5	7	7	10	12	16	21													21	15.11.10 5.2	5.6	
1424c c1	15-Oct0	0	2	4	5	8	9	10	15	20	25	27	28	32	37	40	44	46	53	57				57	8.12.10	10.1	9.9
1424d c1	14-Oct0	2	2	4	6	9	10	10	13	17	22	23	23	29	31	35	38	43	47	48	50	51	53				
1425b c2	15-Oct0	2	2	4	5	9	9	11	12	20	23	26	27	29	34	35	37	43	45	48	50	53	54				
1425d c2	15-Oct0	0	2	4	4	7	8	9	13	19	25													25	15.11.10 8.2	7.6	
1427a c3	15-Oct0	0	2	4	5	7	9	11	14	17	19	23	23	27	30	30	34	37	38	42	45	47		47	15.12.10 6.0	5.2	

1427c c3	15-Oct0	2	4	4	5	8	9	11	12	14	19	22	23	24	24	24	30	32	38	39	41	42	44				
1429c c2	15-Oct0	2	2	4	5	8	9	11	15	19	21	23	28	30	34	35	38	39	44	45				45	8.12.10	9.0	8.2
1430a c1	15-Oct0	2	2	4	5	9	11	11	16	20	25	26	29	32	39	40	44	45	52	54	56	57	59				
1430b c1	15-Oct0	0	2	4	5	8	9	9	12	17	17	20	23	27	29									29	24.11.10	9.2	9.1
1430d c1	15-Oct0	0	2	4	5	8	10	11	14	19	21	26	28	33	34	36	38	40	47	49	54	57		57	15.12.10	8.0	8.7
1432d c1	14-Oct0	0	2	4	6	9	10	12	16	23														23	11.11.10	5.8	6.0
1434c c2	18-Oct0	0	2	2	4	7	7	9	13	17	19													19	15.11.10	9.2	9.6
1434d c2	18-Oct0	0	2	2	4	6	7	9	13	20	27	31	35	42	47	48	55	60	71	74	76	78		78	15.12.10	9.0	8.9
1436d c3	15-Oct0	2	4	5	6	9	11	14	16	23	26	30	30	36	38	38	44	50	53	54	55	57	57				
1437a c1	18-Oct0	0	2	3	4	7	7	8	9	14	16	17	19	24	26	26								26	26.11.10	7.1	8.7
1437d c1	15-Oct0	2	2	3	5	6	6	8	10	10	10	16	17	19	21	25	27	30	33	34	35	37	38				
1438b c1	16-Oct0	0	2	4	4	7	8	10	13															13	8.11.10	4.5	5.0
1438c c1	15-Oct0	2	2	4	5	10	10	11	15	17														17	11.11.10	9.2	9.6
1438d c1	18-Oct0	0	2	4	5	8	8	10	14	20	23	28	30	37										37	22.11.10	7.0	7.2
1439b c2	14-Oct0	0	2	4	5	8	9	11	15	23	30	32	35	40	44	48	50	56	58	59	61	64	67				
1439c c2	15-Oct0	0	2	4	4	7	7	9	14	20	25	27	29	36	39	43	46	46	57	63	63			63	13.12.10	9.5	9.1
1440b c2	15-Oct0	0	2	4	5	7	8	10	13	18	24	25	26	34	38	41	49							49	29.11.10	7.7	7.9
1441a c1	18-Oct0	0	2	2	2	5	6	7	9	12	15	20	21	26	27	29								29	26.11.10	8.1	8.1
1441d c1	18-Oct0	0	2	2	3	5	5	7	10	12														12	11.11.10	6.1	6.2
1442a c3	14-Oct0	2	4	5	7	8	11	12																12	5.11.10	5.7	5.5
1442c c3	16-Oct0	0	2	2	5	6	8	9	13	16	19	22	23	29	30	30	39	46						46	2.12.10	6.8	7.7

1443b c2	15-Oct	0	0	2	2	5	7	8	10	15	19	28	32	36	45	49	52	62	65	81					81	6.12.10		9.2	9.1

Chapter 3: Primary Data

Line ID	Trt/Rep	# Tray	# Pot	Fruits	Height	Basal	Branches	Nodes	DFF
175	D-2	A1	1	104	24	1	4	4	24
1032	D-2	A2	2	134	20	1	3	3	25
2	D-3	A3	3	204	39.2	2	3	3	25
91	D-2	A4	4	133	32.5	0	4	4	25
200	D-1	A5	5	157	38	0	6	7	26
246	D-3	A6	6	7	11	0	5	7	33
508	D-2	A7	7	14	11	0	2	2	25
9	D-1	A8	8	123	46	1	3	3	25
513	D-2	A9	9	133	32	0	3	3	23
553	D-2	A10	10	144	30	0	6	6	26
625	D-2	A11	11	109	16	1	5	5	27
248	D-2	A12	12	116	34	0	4	4	26
28	D-1	A13	13	118	14	0	3	3	21
58	D-1	A14	14	113	24.3	2	3	3	24
73	D-2	A15	15	202	34	3	4	4	24
107	D-3	A16	16	138	37.7	0	5	8	31
640	D-2	A17	17	150	37	0	5	5	25
215	D-1	A18	18	173	20	1	4	4	23
642	D-2	A19	19	125	14	2	5	5	26
434	D-1	A20	20	237	43	2	4	4	24
30	D-2	A21	21	126	30	1	4	4	22
428	D-3	A22	22	140	24	0	5	5	24
272	D-3	A23	23	31	28.2	0	2	2	23
442	D-3	A24	24	56	21.5	0	3	3	24
562	D-2	B1	25	177	28	1	4	4	23
653	D-2	B2	26	104	27.8	2	3	3	26
237	D-1	B3	27	91	22.1	1	3	3	24
837	D-2	B4	28	DEAD	DEAD	DEAD	DEAD	DEAD	24
473	D-2	B5	29	106	26	1	4	4	22

48	D-1	B6	30	111	29	1	3	3	25
486	D-2	B7	31	103	25.3	1	5	5	25
363	D-1	B8	32	106	21	4	0	0	30
218	D-3	B9	33	67	26	0	2	2	21
169	D-1	B10	34	175	37	1	3	3	24
212	D-2	B11	35	98	29	0	5	5	26
1028	D-2	B12	36	DEAD	DEAD	DEAD	DEAD	DEAD	22
1039	D-3	B13	37	DEAD	DEAD	DEAD	DEAD	DEAD	25
496	D-1	B14	38	46	22	5	0	0	30
242	D-2	B15	39	64	32.2	0	6	7	27
278	D-2	B16	40	61	29	0	3	3	28
662	D-3	B17	41	78	32	0	4	5	29
46	D-2	B18	42	80	20	1	2	2	20
675	D-3	B19	43	DEAD	DEAD	DEAD	DEAD	DEAD	DEAD
596	D-1	B20	44	70	19	0	4	4	25
427	D-3	B21	45	93	34	0	4	5	27
883	D-3	B22	46	85	30	0	3	3	24
85	D-1	B23	47	62	47.5	0	5	7	38
480	D-2	B24	48	44	16	2	3	3	21
286	D-2	C1	49	80	31.5	0	2	2	24
447	D-2	C2	50	108	22	1	6	6	25
160	D-1	C3	51	82	23.2	0	4	4	24
409	D-2	C4	52	111	34.4	0	4	8	35
29	D-3	C5	53	159	39.4	3	4	4	25
506	D-3	C6	54	83	33	0	3	3	29
84	D-2	C7	55	59	14	2	3	3	25
121	D-3	C8	56	64	21	0	5	5	28
452	D-1	C9	57	90	28.5	0	4	4	30
41	D-3	C10	58	47	33	0	4	4	25
410	D-3	C11	59	78	26	0	4	4	23
661	D-1	C12	60	116	29.5	0	7	7	29
262	D-2	C13	61	61	33	1	3	3	29
535	D-1	C14	62	71	41.9	0	4	6	33

347	D-1	C15	63	116	32	2	3	3	26
249	D-3	C16	64	81	19.9	0	5	6	29
511	D-2	C17	65	95	29.5	0	4	4	26
56	D-1	C18	66	NO	NO	NO	NO	NO	NO
129	D-3	C19	67	107	37.1	1	3	3	29
222	D-3	C20	68	40	35	1	3	3	23
10	D-2	C21	69	134	29	0	1	6	36
627	D-2	C22	70	72	29.3	0	4	5	28
22	D-3	C23	71	78	25.6	0	3	3	25
639	D-2	C24	72	89	36	1	4	4	26
140	D-3	D1	73	55	16.7	0	3	3	29
112	D-2	D2	74	117	16	0	4	4	29
32	D-1	D3	75	74	8.5	0	5	5	27
75	D-1	D4	76	185	31	0	8	8	30
145	D-3	D5	77	179	34	0	7	7	29
215	D-2	D6	78	111	21.5	2	4	4	23
653	D-1	D7	79	136	28.9	1	3	3	27
831	D-1	D8	80	130	25	3	3	3	23
195	D-3	D9	81	154	30	2	3	3	27
945	D-2	D10	82	117	25	0	4	4	24
36	D-3	D11	83	168	58	0	6	7	33
524	D-3	D12	84	102	37	0	2	5	32
446	D-3	D13	85	80	25	0	6	6	33
6	D-2	D14	86	200	51	1	5	5	32
7	D-1	D15	87	50	22	0	3	3	26
581	D-1	D16	88	136	34	0	6	7	30
856	D-3	D17	89	92	30.5	2	3	3	26
137	D-2	D18	90	162	41	0	4	4	28
547	D-1	D19	91	108	22	0	4	4	26
129	D-1	D20	92	88	36	0	4	5	30
459	D-3	D21	93	138	36.1	0	4	4	27
424	D-2	D22	94	124	25	0	6	6	29
563	D-2	D23	95	145	38	0	6	6	30

664	D-1	D24	96	71	29	0	4	4	29	
286	D-1	E1	97	59	29.2	0	2	2	22	
590	D-1	E2	98	83	12.2	0	3	3	22	
52	D-1	E3	99	58	23.5	1	2	2	25	
355	D-1	E4	100	109	26	2	6	6	30	
600	D-1	E5	101	95	24.1	0	3	3	24	
166	D-3	E6	102	132	30	2	3	3	23	
75	D-3	E7	103	241	33.3	3	6	6	29	
518	D-1	E8	104	79	30	0	7	9	31	
422	D-1	E9	105	205	40	2	4	4	27	
203	D-1	E10	106	158	32	0	4	4	23	
246	D-1	E11	107	52	26.2	0	4	5	31	
247	D-3	E12	108	140	30	0	7	7	32	
640	D-3	E13	109	67	29.1	1	3	3	26	
233	D-3	E14	110	221	25.3	1	3	3	23	
111	D-3	E15	111	158	31	3	4	4	29	
244	D-1	E16	112	DEAD	DEAD	DEAD	DEAD	DEAD	24	
591	D-1	E17	113	76	27	3	3	3	26	
217	D-3	E18	114	71	18.7	2	4	4	25	
535	D-2	E19	115	83	41.5	0	3	7	35	
273	D-2	E20	116	77	28.3	0	3	3	26	
57	D-1	E21	117	132	25	0	5	5	25	
672	D-3	E22	118	133	40.2	0	4	4	28	
709	D-2	E23	119	123	33.4	0	5	6	29	
543	D-1	E24	120	90	31	0	4	6	31	
512	D-3	F1	121	145	20.1	3	3	3	22	
147	D-3	F2	122	134	32.2	0	7	7	28	
125	D-1	F3	123	87	34.5	0	3	6	30	
182	D-1	F4	124	101	37.5	0	7	7	30	
409	D-3	F5	125	140	34	0	6	6	32	
47	D-3	F6	126	54	24	0	3	3	24	
6	D-3	F7	127	NO	NO	NO	NO	NO	NO	
492	D-2	F8	128	109	35.2	0	2	3	28	

536	D-3	F9	129	142	40	3	4	4	26
823	D-1	F10	130	240	30	3	4	4	24
450	D-2	F11	131	93	29	0	3	3	22
258	D-1	F12	132	29	19	0	3	3	27
625	D-1	F13	133	140	16.5	3	5	5	26
479	D-1	F14	134	137	38.4	1	3	3	24
523	D-3	F15	135	158	37.8	3	4	4	26
194	D-2	F16	136	149	35.7	3	5	5	26
348	D-2	F17	137	134	34.4	1	4	4	28
246	D-2	F18	138	20	23.1	0	7	7	30
659	D-3	F19	139	135	27	0	3	4	29
247	D-2	F20	140	114	30	2	3	3	28
602	D-2	F21	141	115	26.6	1	4	4	25
331	D-3	F22	142	118	30.5	0	8	8	29
2	D-2	F23	143	172	28.5	3	3	3	22
44	D-2	F24	144	89	25.6	2	3	3	22
654	D-1	G1	145	126	49.5	0	4	6	35
186	D-2	G2	146	109	31	1	3	3	23
512	D-2	G3	147	121	24	1	3	3	24
151	D-1	G4	148	189	31	2	2	2	22
615	D-3	G5	149	154	30	3	3	3	23
80	D-3	G6	150	68	32	0	3	6	28
59	D-2	G7	151	203	32	3	3	3	25
560	D-2	G8	152	173	27.8	1	3	3	24
510	D-3	G9	153	171	40	2	5	5	30
131	D-1	G10	154	127	40	0	8	8	36
145	D-1	G11	155	247	45	1	7	7	28
131	D-2	G12	156	111	38	0	6	8	34
420	D-1	G13	157	94	22	1	3	3	24
422	D-2	G14	158	135	31	0	3	3	22
436	D-3	G15	159	208	37	2	4	4	26
281	D-2	G16	160	91	27.3	4	5	5	28
425	D-3	G17	161	162	30.8	3	4	4	24

479	D-2	G18	162	110	35	2	3	3	24
235	D-3	G19	163	87	29	0	3	3	27
439	D-1	G20	164	114	48	0	4	7	34
983	D-2	G21	165	81	19	2	3	3	22
185	D-3	G22	166	120	40	0	5	8	31
162	D-2	G23	167	83	33.3	3	5	5	28
573	D-3	G24	168	141	35.5	1	5	5	30
565	D-2	H1	169	111	28	1	4	4	23
197	D-2	H2	170	102	13	0	5	5	27
945	D-1	H3	171	118	23.3	3	3	3	23
592	D-3	H4	172	160	37	1	4	4	28
262	D-1	H5	173	65	36.5	1	2	2	26
455	D-3	H6	174	66	33.5	0	2	2	25
707	D-1	H7	175	142	38	0	7	7	30
17	D-2	H8	176	58	30.5	3	7	7	28
440	D-1	H9	177	88	34	1	4	4	24
425	D-2	H10	178	145	31	1	4	4	25
143	D-2	H11	179	133	57	1	5	8	37
302	D-2	H12	180	59	45.4	0	4	7	34
34	D-1	H13	181	NO	NO	NO	NO	NO	NO
151	D-3	H14	182	201	35	4	4	4	24
594	D-2	H15	183	210	36.5	4	3	3	25
238	D-3	H16	184	92	33.6	1	4	4	27
254	D-1	H17	185	160	29	3	3	3	24
252	D-1	H18	186	80	41.2	1	4	4	24
503	D-3	H19	187	142	35	2	3	3	28
44	D-3	H20	188	41	22	0	3	3	26
569	D-1	H21	189	32	11	0	1	5	33
666	D-3	H22	190	163	34.1	1	4	4	27
659	D-1	H23	191	67	31	0	3	5	36
593	D-3	H24	192	91	23.6	0	4	4	23
44	D-1	I1	193	109	22.1	2	3	3	24
166	D-2	I2	194	117	37.3	1	3	3	25

347	D-3	I3	195	128	26.5	2	4	4	24
983	D-1	I4	196	143	41.3	1	5	5	27
496	D-3	I5	197	145	31.3	3	7	7	29
519	D-3	I6	198	142	33	0	6	6	30
290	D-1	I7	199	180	32.5	3	3	3	23
156	D-3	I8	200	168	41.6	1	5	5	26
833	D-2	I9	201	138	25.2	2	3	3	26
224	D-3	I10	202	87	27.5	1	5	5	26
416	D-3	I11	203	183	36.8	3	6	6	26
837	D-3	I12	204	DEAD	DEAD	DEAD	DEAD	DEAD	DEAD
53	D-2	I13	205	185	26.7	3	6	6	23
92	D-3	I14	206	144	28.9	3	3	3	30
831	D-3	I15	207	99	31.5	1	3	3	24
270	D-1	I16	208	148	35	0	4	4	25
494	D-1	I17	209	112	32	0	7	8	32
156	D-1	I18	210	174	38	1	4	4	25
18	D-1	I19	211	136	29.2	2	3	3	24
76	D-2	I20	212	101	27	3	4	4	27
241	D-2	I21	213	87	32.8	0	6	6	32
125	D-2	I22	214	124	39	0	5	8	35
547	D-3	I23	215	117	27	0	5	5	24
352	D-1	I24	216	80	38	0	4	4	29
506	D-1	J1	217	146	31	1	4	4	27
474	D-1	J2	218	162	28	2	3	3	23
25	D-1	J3	219	108	34.2	1	3	3	26
607	D-2	J4	220	179	14	2	3	3	25
453	D-2	J5	221	99	26	0	5	5	29
97	D-3	J6	222	139	26	2	3	3	22
482	D-3	J7	223	130	33	0	6	6	29
628	D-3	J8	224	118	17	0	4	4	24
445	D-2	J9	225	183	38	0	5	5	29
610	D-1	J10	226	123	27.2	2	3	3	23
457	D-3	J11	227	129	39.6	0	4	4	25

719	D-3	J12	228	84	11	0	4	4	26
55	D-3	J13	229	204	19	1	3	3	22
611	D-2	J14	230	187	34	0	5	5	26
42	D-2	J15	231	93	23	0	3	3	24
606	D-3	J16	232	141	23	1	4	4	23
94	D-1	J17	233	135	26	0	4	4	24
48	D-3	J18	234	137	33	1	3	3	24
719	D-2	J19	235	29	9.8	0	4	4	23
665	D-1	J20	236	110	38	1	2	2	21
603	D-1	J21	237	101	28.6	0	5	5	29
480	D-3	J22	238	63	20	2	2	2	19
219	D-1	J23	239	83	37.4	0	3	3	28
849	D-3	J24	240	108	14	3	3	3	22
358	D-1	K1	241	51	35.1	3	3	3	24
118	D-1	K2	242	78	29	0	3	3	26
508	D-3	K3	243	136	32	1	4	4	25
581	D-2	K4	244	142	34.7	0	5	5	29
665	D-2	K5	245	125	36.5	1	2	2	21
436	D-2	K6	246	108	31.1	1	5	5	25
155	D-1	K7	247	192	30.2	3	4	4	28
260	D-2	K8	248	71	38.3	0	3	3	24
596	D-2	K9	249	184	36.8	2	4	4	27
355	D-2	K10	250	130	28.8	2	5	5	26
301	D-1	K11	251	100	34	0	3	3	27
652	D-2	K12	252	134	34	2	4	4	28
183	D-3	K13	253	58	30	0	4	4	32
575	D-2	K14	254	129	30.7	0	4	4	23
248	D-3	K15	255	63	34.8	0	3	4	29
275	D-1	K16	256	77	30.5	2	3	3	26
97	D-2	K17	257	81	31.9	1	2	2	21
523	D-2	K18	258	132	36	0	4	4	24
590	D-3	K19	259	83	14.8	0	4	4	22
467	D-2	K20	260	135	23	3	3	3	23

554	D-1	K21	261	91	25	1	4	4	25	
462	D-1	K22	262	158	30	1	3	3	23	
300	D-2	K23	263	95	24	1	3	3	22	
855	D-3	K24	264	7	13	2	1	1	21	
278	D-1	L1	265	109	32	1	5	5	27	
415	D-3	L2	266	174	28.7	2	4	4	22	
420	D-2	L3	267	108	24	2	3	3	23	
511	D-1	L4	268	98	26	0	4	4	24	
543	D-3	L5	269	132	41	0	5	5	30	
249	D-1	L6	270	124	30	0	4	5	27	
232	D-1	L7	271	116	31	0	4	4	26	
617	D-1	L8	272	177	42	0	6	6	31	
459	D-2	L9	273	199	45	0	6	6	29	
600	D-2	L10	274	61	25.1	0	3	3	25	
463	D-3	L11	275	141	35.2	0	5	5	29	
449	D-2	L12	276	170	47.3	2	3	3	29	
98	D-2	L13	277	130	28	0	3	3	25	
78	D-2	L14	278	41	27	0	3	5	33	
472	D-3	L15	279	148	20.1	3	2	2	21	
232	D-2	L16	280	85	29	1	4	4	25	
494	D-3	L17	281	118	28	3	4	4	29	
641	D-1	L18	282	80	30	0	5	5	28	
610	D-2	L19	283	149	23	3	3	3	23	
738	D-1	L20	284	95	22	0	4	4	28	
513	D-1	L21	285	79	24	1	2	2	20	
137	D-1	L22	286	46	25	1	3	3	26	
1032	D-3	L23	287	72	18	1	3	3	31	
114	D-1	L24	288	101	28	0	5	5	23	
566	D-2	M1	289	125	29	1	3	3	24	
191	D-2	M2	290	73	20	1	2	2	23	
736	D-2	M3	291	97	28.8	0	3	3	26	
354	D-3	M4	292	169	33.6	3	6	6	28	
828	D-3	M5	293	145	37	0	6	6	29	

75	D-2	M6	294	217	38.2	0	8	8	32	
486	D-3	M7	295	179	34	3	5	5	26	
518	D-2	M8	296	158	44.2	0	6	6	31	
562	D-1	M9	297	273	40	2	3	3	23	
286	D-3	M10	298	115	34	0	3	3	22	
200	D-2	M11	299	156	36	0	6	6	29	
336	D-3	M12	300	119	25	1	3	3	22	
591	D-2	M13	301	178	26.1	4	3	3	24	
738	D-2	M14	302	125	31	1	5	5	28	
163	D-2	M15	303	65	52.1	0	3	3	29	
856	D-2	M16	304	126	33	3	3	3	25	
159	D-2	M17	305	108	33	1	2	2	20	
496	D-2	M18	306	91	36	2	5	5	30	
623	D-2	M19	307	108	29.6	1	4	4	25	
204	D-2	M20	308	132	29	0	4	4	27	
685	D-3	M21	309	208	40	1	3	3	22	
348	D-1	M22	310	152	34.2	0	6	6	28	
536	D-1	M23	311	147	35	0	4	4	29	
628	D-1	M24	312	71	16	2	3	3	23	
264	D-1	N1	313	121	36.5	1	5	5	30	
474	D-3	N2	314	98	Main stem broken		3	NO	NO	22
652	D-1	N3	315	93	32.8	1	4	4	27	
523	D-1	N4	316	132	36	0	5	5	25	
688	D-2	N5	317	130	43	3	3	3	24	
95	D-3	N6	318	10	36	0	4	6	33	
96	D-3	N7	319	181	32	4	3	3	26	
434	D-2	N8	320	176	46	2	3	3	25	
460	D-2	N9	321	193	41.5	1	6	6	28	
722	D-2	N10	322	108	42	0	3	3	26	
589	D-1	N11	323	172	41	2	4	4	25	
55	D-2	N12	324	109	20.2	1	3	3	23	
140	D-2	N13	325	133	46.5	1	5	5	30	
1028	D-3	N14	326	192	22	4	4	4	25	

104	D-1	N15	327	189	30	3	1	1	22	
444	D-1	N16	328	128	37	2	3	3	25	
446	D-1	N17	329	117	30.4	0	7	7	33	
472	D-2	N18	330	216	20	2	3	3	22	
726	D-3	N19	331	105	20	2	3	3	25	
92	D-1	N20	332	174	28.5	5	4	4	27	
3	D-3	N21	333	168	38	4	4	4	29	
620	D-2	N22	334	121	36	1	5	5	30	
413	D-2	N23	335	190	21	3	3	3	24	
97	D-1	N24	336	73	28	2	3	3	23	
176	D-1	O1	337	142	33	3	3	3	23	
158	D-2	O2	338	61	28.5	0	3	3	31	
12	D-2	O3	339	251	45.7	3	4	4	25	
129	D-2	O4	340	139	44.5	1	4	4	25	
47	D-2	O5	341	83	26	2	2	2	22	
566	D-1	O6	342	132	31	2	3	3	24	
589	D-3	O7	343	213	34	2	6	6	24	
212	D-1	O8	344	202	39.8	4	4	4	25	
233	D-1	O9	345	141	35.6	2	3	3	24	
594	D-3	O10	346	103	33.3	1	3	3	26	
134	D-1	O11	347	142	34	2	2	2	22	
188	D-2	O12	348	140	32	2	4	4	25	
165	D-2	O13	349	117	35	2	3	3	24	
270	D-2	O14	350	168	35.5	4	3	3	25	
504	D-1	O15	351	141	29	3	3	3	24	
727	D-2	O16	352	140	41.5	2	4	4	24	
18	D-3	O17	353	172	36	3	3	3	24	
257	D-1	O18	354	63	31.5	0	3	3	26	
415	D-2	O19	355	155	26	3	2	2	21	
210	D-2	O20	356	145	19.5	1	4	4	22	
237	D-2	O21	357	143	33	3	3	3	25	
641	D-2	O22	358	132	37	0	6	6	29	
71	D-2	O23	359	63	18	0	3	3	23	

685	D-1	O24	360	75	25	2	0	0	21
71	D-3	P1	361	92	18	0	3	3	23
580	D-2	P2	362	141	34	3	3	3	25
945	D-3	P3	363	127	29	2	3	3	22
738	D-3	P4	364	139	30	0	5	5	26
424	D-1	P5	365	106	26	0	4	4	26
38	D-2	P6	366	127	38.7	1	3	3	22
165	D-1	P7	367	110	32	3	3	3	24
503	D-2	P8	368	94	28	1	4	4	29
160	D-2	P9	369	129	21	2	3	3	26
403	D-2	P10	370	161	26.8	1	3	3	25
12	D-1	P11	371	175	36.4	3	3	3	27
57	D-3	P12	372	96	20	1	4	4	23
640	D-1	P13	373	55	25.8	1	4	4	22
642	D-1	P14	374	112	9	3	7	7	27
116	D-2	P15	375	72	18	2	4	4	30
43	D-1	P16	376	117	34	2	4	4	30
158	D-1	P17	377	66	16	1	5	6	31
354	D-2	P18	378	105	20	4	4	4	28
503	D-1	P19	379	150	31.4	2	4	4	30
49	D-3	P20	380	164	27	0	6	6	30
856	D-1	P21	381	112	21	0	3	3	23
558	D-1	P22	382	94	25	1	3	3	21
602	D-1	P23	383	107	28	2	2	2	23
1021	D-3	P24	384	DEAD	DEAD	DEAD	DEAD	DEAD	DEAD
400	D-2	Q1	385	256	39	3	5	5	24
534	D-2	Q2	386	78	29.5	1	4	4	21
164	D-3	Q3	387	63	30	1	3	3	24
247	D-1	Q4	388	159	29	5	5	5	26
241	D-3	Q5	389	97	31	0	4	4	29
501	D-1	Q6	390	136	48	1	3	3	25
167	D-3	Q7	391	113	34	0	4	4	23
450	D-3	Q8	392	111	32	2	3	3	21

518	D-3	Q9	393	79	32.5	0	3	3	28	
121	D-2	Q10	394	97	33.8	2	3	3	26	
223	D-3	Q11	395	117	37	4	4	4	25	
27	D-1	Q12	396	129	26 (broken)		3	3	3	28
609	D-3	Q13	397	123	37.5	2	3	3	23	
439	D-3	Q14	398	141	37.4	0	7	8	30	
46	D-1	Q15	399	220	34	2	2	2	20	
489	D-3	Q16	400	61	33	1	3	3	22	
176	D-3	Q17	401	157	30.5	1	4	4	24	
579	D-1	Q18	402	110	29	1	4	4	22	
654	D-3	Q19	403	160	43.3	0	5	7	35	
719	D-1	Q20	404	94	13.9	1	4	4	25	
167	D-2	Q21	405	71	32	1	2	2	28	
76	D-1	Q22	406	126	28.1	3	3	3	25	
528	D-2	Q23	407	137	10	2	1	1	21	
441	D-1	Q24	408	121	32	2	4	4	26	
295	D-1	R1	409	119	31.2	3	3	3	24	
230	D-2	R2	410	109	30	2	4	4	26	
24	D-2	R3	411	179	22	1	4	4	22	
647	D-3	R4	412	86	18	2	1	1	21	
467	D-1	R5	413	DEAD	DEAD	DEAD	DEAD	DEAD	24	
275	D-3	R6	414	93	27	3	3	3	29	
675	D-1	R7	415	123	36.5	0	5	5	25	
425	D-1	R8	416	147	37	4	4	4	23	
85	D-2	R9	417	4	14.5	0	5	5	48	
41	D-1	R10	418	164	36	3	3	3	23	
863	D-2	R11	419	159	26	3	3	3	22	
482	D-2	R12	420	115	34.2	0	8	8	32	
823	D-2	R13	421	136	35	3	3	3	25	
162	D-3	R14	422	147	38.6	3	3	3	31	
472	D-1	R15	423	191	22	2	2	2	22	
611	D-3	R16	424	170	35.5	1	5	5	29	
112	D-3	R17	425	128	28.5	0	5	5	28	

610	D-3	R18	426	109	28.4	2	2	2	25
626	D-1	R19	427	102	27.3	1	3	3	27
168	D-2	R20	428	112	28.4	2	3	3	25
4	D-1	R21	429	88	29	0	5	5	25
462	D-3	R22	430	161	29	1	4	4	23
281	D-1	R23	431	122	28	3	4	4	28
214	D-3	R24	432	157	19	2	3	3	21
437	D-3	S1	433	144	32	4	3	3	25
96	D-2	S2	434	151	29	2	3	3	27
197	D-1	S3	435	138	14.3	2	3	3	24
118	D-3	S4	436	154	36.5	1	3	3	23
341	D-1	S5	437	94	21.6	3	5	6	29
341	D-3	S6	438	49	26	0	2	5	34
411	D-3	S7	439	128	38	0	7	7	31
198	D-1	S8	440	191	52.5	2	6	6	35
611	D-1	S9	441	253	35.8	1	6	6	29
736	D-1	S10	442	153	34.7	0	7	8	31
560	D-3	S11	443	192	30.6	1	3	3	24
219	D-2	S12	444	1323	49	0	4	4	28
217	D-1	S13	445	89	26	1	4	4	23
49	D-1	S14	446	188	36	0	6	6	30
21	D-3	S15	447	NO	NO	NO	NO	NO	NO
272	D-2	S16	448	150	38	0	4	4	28
84	D-1	S17	449	119	17.5	2	4	4	25
562	D-3	S18	450	148	33	3	2	2	23
641	D-3	S19	451	103	31.4	0	8	8	31
302	D-3	S20	452	102	37.2	0	6	6	28
476	D-2	S21	453	182	24	2	3	3	23
720	D-3	S22	454	125	16.6	4	2	2	21
199	D-3	S23	455	131	22.8	0	4	4	25
567	D-3	S24	456	NO	NO	NO	NO	NO	NO
551	D-1	T1	457	169	37	1	4	4	32
114	D-3	T2	458	141	31.6	0	5	5	27

572	D-1	T3	459	118	29.4	0	7	7	31	
239	D-3	T4	460	71	25	1	3	3	22	
272	D-1	T5	461	71	24	0	4	4	27	
2	D-1	T6	462	189	40	1	4	4	29	
295	D-2	T7	463	94	11	1	4	4	24	
1033	D-2	T8	464	165	32.5	1	4	4	25	
854	D-3	T9	465	222	27	2	3	3	23	
273	D-1	T10	466	91	35	1	3	3	26	
130	D-1	T11	467	67	30.5	0	4	4	24	
460	D-1	T12	468	94	30.3	0	6	6	31	
131	D-3	T13	469	154	37.5	0	7	7	33	
555	D-2	T14	470	168	33	1	3	3	23	
302	D-1	T15	471	176	50	0	7	7	32	
143	D-1	T16	472	42	38.1	0	3	5	31	
485	D-2	T17	473	56	13	0	1	1	31	
203	D-3	T18	474	211	32	2	5	5	23	
252	D-2	T19	475	DEAD	DEAD	DEAD	DEAD	DEAD	21	
141	D-1	T20	476	137	26	0	5	5	24	
3	D-1	T21	477	250	40.5	4	5	5	29	
365	D-2	T22	478	129	34	2	3	3	28	
175	D-1	T23	479	149	27	0	5	5	24	
464	D-2	T24	480	85	38.5	0	3	3	25	
553	D-1	U1	481	237	31	2	5	5	27	
707	D-3	U2	482	226	39	1	7	7	31	
261	D-1	U3	483	204	28	2	2	2	21	
220	D-3	U4	484	104	26	0	5	5	27	
68	D-2	U5	485	104	30	3	3	3	23	
58	D-3	U6	486	80	15	2	3	3	22	
164	D-2	U7	487	175	34.9	2	3	3	22	
432	D-1	U8	488	194	19	4	3	3	25	
72	D-1	U9	489	289	30.3	2	5	5	24	
1	D-1	U10	490	253	28.1	4	2	2	21	
662	D-2	U11	491	124	31.7	0	7	7	31	

258	D-3	U12	492	87	31.5	0	3	3	30	
598	D-3	U13	493	108	29	0	4	5	30	
220	D-1	U14	494	63	20	1	4	4	25	
363	D-3	U15	495	62	23	4	4	4	29	
204	D-1	U16	496	63	31	0	5	5	31	
535	D-3	U17	497	95	58	1	1	3	34	
242	D-3	U18	498	144	36.4	2	5	5	25	
235	D-2	U19	499	72	27	0	3	3	28	
34	D-2	U20	500	106	26	0	6	6	28	
697	D-1	U21	501	72	29.2	3	8	8	31	
983	D-3	U22	502	61	27.1	2	3	3	22	
563	D-1	U23	503	79	33	0	6	6	30	
170	D-2	U24	504	146	16	2	3	3	22	
534	D-3	V1	505	15	14.5	0	2	2	22	
112	D-1	V2	506	156	29	2	6	6	31	
603	D-2	V3	507	66	18.2	0	5	5	29	
410	D-2	V4	508	93	32	2	3	3	23	
352	D-3	V5	509	88	35.5	1	2	2	29	
720	D-2	V6	510	167	22.5	3	3	3	23	
67	D-1	V7	511	128	28.4	3	1	1	20	
67	D-3	V8	512	181	33	2	3	3	21	
806	D-1	V9	513	150	32.3	2	3	3	25	
662	D-1	V10	514	99	31.5	0	8	8	32	
628	D-2	V11	515	81	20	1	2	2	22	
491	D-1	V12	516	46	20.3	0	6	6	31	
241	D-1	V13	517	58	23	0	4	4	30	
281	D-3	V14	518	166	27	4	6	6	29	
411	D-1	V15	519	96	37.1	0	6	7	31	
504	D-2	V16	520	138	24.5	0	4	4	24	
115	D-1	V17	521	130	25.1	2	3	3	21	
89	D-3	V18	522	106	23	2	3	3	23	
36	D-2	V19	523	130	43.2	0	3	5	27	
10	D-1	V20	524	112	46	1	2	2	37	

580	D-1	V21	525	152	27.4	1	4	4	24
4	D-3	V22	526	151	25	3	3	3	25
721	D-1	V23	527	DEAD	DEAD	DEAD	DEAD	DEAD	DEAD
32	D-2	V24	528	98	12	1	4	4	25
114	D-2	W1	529	124	28.8	0	6	6	24
654	D-2	W2	530	138	56	0	5	5	35
463	D-1	W3	531	148	40	0	5	5	29
301	D-2	W4	532	126	39	1	4	1	26
653	D-3	W5	533	93	23.5	0	5	5	27
564	D-2	W6	534	111	41	0	3	4	28
72	D-3	W7	535	143	29	1	3	3	23
707	D-2	W8	536	157	39.5	1	6	6	31
688	D-3	W9	537	108	37.1	1	3	3	24
536	D-2	W10	538	155	39.5	0	6	6	30
566	D-3	W11	539	130	32.1	2	2	2	24
59	D-3	W12	540	130	31	2	2	2	24
248	D-1	W13	541	61	25.1	0	3	3	25
451	D-1	W14	542	190	25	2	4	4	23
529	D-2	W15	543	172	29	1	5	5	25
473	D-1	W16	544	175	26.8	1	3	3	22
103	D-2	W17	545	111	26	0	4	4	29
273	D-3	W18	546	112	35	3	4	4	26
265	D-1	W19	547	88	29	1	3	3	24
176	D-2	W20	548	205	25	3	3	3	23
1033	D-3	W21	549	168	15.9	2	2	2	21
38	D-1	W22	550	172	22	3	2	2	21
203	D-2	W23	551	178	26	1	6	6	23
200	D-3	W24	552	150	31.2	0	9	10	29
617	D-2	X1	553	106	49.8	0	6	9	35
533	D-3	X2	554	104	15.2	1	3	3	20
155	D-2	X3	555	198	21.9	2	4	4	23
204	D-3	X4	556	138	26.7	0	5	5	28
709	D-1	X5	557	120	33.5	0	5	5	25

95	D-2	X6	558	125	44	0	2	7	34	
187	D-1	X7	559	127	28.3	4	5	5	27	
722	D-3	X8	560	147	38	0	3	3	25	
230	D-3	X9	561	146	35.8	1	4	4	27	
414	D-3	X10	562	129	18.5	0	4	7	35	
709	D-3	X11	563	119	36	1	4	4	25	
84	D-3	X12	564	133	17	2	4	4	24	
128	D-1	X13	565	99	38.5	0	4	8	40	
243	D-1	X14	566	309	37	6	6	6	27	
160	D-3	X15	567	121	21.4	1	4	4	25	
541	D-3	X16	568	67	20	0	2	2	25	
541	D-1	X17	569	121	27.3	1	4	4	26	
179	D-1	X18	570	114	25.2	1	3	3	20	
49	D-2	X19	571	137	33	0	6	6	31	
271	D-2	X20	572	89	21.3	2	3	3	25	
278	D-3	X21	573	159	38	3	3	3	29	
41	D-2	X22	574	250	36	3	4	4	24	
651	D-1	X23	575	94	21	0	3	3	23	
300	D-3	X24	576	119	31	1	4	4	23	
806	D-2	Y1	577	146	11	3	1	1	22	
260	D-3	Y2	578	74	25	1	3	3	21	
26	D-3	Y3	579	156	38.2	1	5	5	29	
47	D-1	Y4	580	74	25.5	2	2	2	25	
457	D-2	Y5	581	162	30	2	5	5	25	
352	D-2	Y6	582	65	32.7	1	3	3	25	
688	D-1	Y7	583	123	8	2	0	1	22	
459	D-1	Y8	584	145	44.2	0	8	8	33	
833	D-1	Y9	585	150	22	0	4	4	25	
228	D-2	Y10	586	99	27.1	0	3	3	24	
186	D-1	Y11	587	65	21	0	4	4	24	
187	D-2	Y12	588	96	25.5	0	4	6	30	
440	D-2	Y13	589	134	23	2	3	3	22	
178	D-3	Y14	590	152	24.3	1	3	3	21	

485	D-3	Y15	591	167	14	2	4	4	28
9	D-3	Y16	592	124	37.5	2	4	4	23
672	D-1	Y17	593	196	42.2	1	5	5	29
225	D-3	Y18	594	124	23.5	3	2	2	21
471	D-1	Y19	595	99	34.5	1	4	4	32
703	D-2	Y20	596	152	23.5	1	5	5	25
429	D-3	Y21	597	98	22	0	4	5	24
414	D-1	Y22	598	146	20.4	0	6	7	33
448	D-3	Y23	599	228	31	3	4	4	27
835	D-1	Y24	600	77	19	1	4	4	22
301	D-3	Z1	601	67	45	3	5	5	30
338	D-2	Z2	602	181	35.5	1	4	4	24
224	D-2	Z3	603	67	31	2	4	4	26
554	D-3	Z4	604	134	33.6	2	4	4	27
500	D-1	Z5	605	88	32.4	0	4	4	29
428	D-2	Z6	606	87	24.8	0	6	6	24
461	D-3	Z7	607	110	41.6	0	4	4	26
140	D-1	Z8	608	101	39.7	3	2	2	27
497	D-1	Z9	609	272	34	3	3	3	24
661	D-3	Z10	610	212	41.6	1	8	8	31
7	D-2	Z11	611	42	32	1	1	1	24
471	D-2	Z12	612	105	41	1	5	5	33
467	D-3	Z13	613	235	29.8	3	4	4	24
128	D-3	Z14	614	172	38	0	7	7	38
403	D-3	Z15	615	222	38.2	3	3	3	25
195	D-1	Z16	616	123	31.4	3	5	5	30
182	D-2	Z17	617	187	43	1	6	6	29
354	D-1	Z18	618	128	35	3	6	6	30
594	D-1	Z19	619	159	35	3	3	3	27
109	D-3	Z20	620	100	40	0	4	4	26
403	D-1	Z21	621	214	38.5	2	3	3	25
228	D-3	Z22	622	89	23.4	0	3	3	23
508	D-1	Z23	623	170	38	1	4	4	27

68	D-3	Z24	624	148	36	2	4	4	24
103	D-1	AA1	625	127	35	0	6	6	30
727	D-1	AA2	626	111	34	1	6	6	26
266	D-3	AA3	627	76	33	1	2	2	30
563	D-3	AA4	628	97	33.5	0	5	5	29
623	D-3	AA5	629	142	33.6	3	4	4	26
444	D-3	AA6	630	55	19	0	3	3	23
455	D-1	AA7	631	102	36	1	3	3	24
262	D-3	AA8	632	155	51	3	4	4	26
602	D-3	AA9	633	143	36	2	4	4	25
126	D-3	AA10	634	157	40.6	0	5	5	30
1	D-2	AA11	635	138	21.5	3	3	3	21
686	D-3	AA12	636	NO	NO	NO	NO	NO	24
721	D-2	AA13	637	NO	NO	NO	NO	NO	DEAD
504	D-3	AA14	638	162	32	4	3	3	25
888	D-1	AA15	639	103	38.7	0	4	4	27
437	D-1	AA16	640	98	35	2	3	3	26
591	D-3	AA17	641	144	30	2	3	3	23
195	D-2	AA18	642	72	31	2	2	2	29
279	D-3	AA19	643	81	15	0	3	3	25
136	D-3	AA20	644	227	39	5	7	7	29
608	D-1	AA21	645	127	40	0	5	5	29
336	D-1	AA22	646	139	23	3	3	3	21
36	D-1	AA23	647	129	45.4	0	4	6	32
461	D-2	AA24	648	154	39.1	1	3	3	28
216	D-2	AB1	649	124	25	2	4	4	26
295	D-3	AB2	650	94	15	1	4	4	24
54	D-2	AB3	651	178	51.5	0	7	7	30
446	D-2	AB4	652	166	44.4	0	7	7	33
663	D-3	AB5	653	172	32	2	3	3	22
331	D-2	AB6	654	137	39.3	0	6	6	28
1039	D-1	AB7	655	173	35	2	4	4	27
259	D-3	AB8	656	200	44	0	6	6	30

419	D-3	AB9	657	120	29.6	1	4	4	28
533	D-2	AB10	658	72	28	1	2	2	21
1032	D-1	AB11	659	DEAD	DEAD	DEAD	DEAD	DEAD	DEAD
495	D-2	AB12	660	134	31.6	3	3	3	23
408	D-3	AB13	661	196	43.5	2	6	6	30
198	D-2	AB14	662	223	44	0	7	7	35
435	D-1	AB15	663	170	46	2	3	3	27
442	D-1	AB16	664	107	32	1	4	4	27
642	D-3	AB17	665	120	16	2	4	4	25
1028	D-1	AB18	666	190	17.8	2	3	3	23
130	D-3	AB19	667	98	38.6	0	4	4	23
244	D-2	AB20	668	89	33.5	1	4	4	26
664	D-2	AB21	669	151	41	0	5	5	31
806	D-3	AB22	670	139	34	1	4	4	23
452	D-3	AB23	671	93	33	0	3	5	30
615	D-1	AB24	672	147	32.5	3	3	3	23
30	D-1	AC1	673	176	33	3	2	2	21
557	D-1	AC2	674	148	36.8	5	2	2	24
155	D-3	AC3	675	231	35.5	2	3	3	24
42	D-1	AC4	676	123	34.5	1	2	2	25
78	D-1	AC5	677	75	61.3	0	5	7	40
225	D-1	AC6	678	97	31	3	3	3	22
24	D-3	AC7	679	193	23	2	3	3	19
300	D-1	AC8	680	89	34	1	4	4	23
3	D-2	AC9	681	261	45	4	6	6	30
420	D-3	AC10	682	180	30.5	2	4	4	25
106	D-2	AC11	683	158	38.7	3	6	6	30
168	D-1	AC12	684	160	32.5	4	3	3	26
53	D-1	AC13	685	227	34	5	4	4	25
477	D-3	AC14	686	237	45	2	5	5	26
575	D-1	AC15	687	183	35.4	3	4	4	26
608	D-2	AC16	688	169	45.2	0	5	5	29
55	D-1	AC17	689	109	20.5	3	3	3	22

217	D-2	AC18	690	108	30	5	3	3	23
530	D-3	AC19	691	131	36	0	6	6	30
115	D-2	AC20	692	254	35.5	2	4	4	21
332	D-3	AC21	693	123	31	1	4	4	27
600	D-3	AC22	694	121	33.4	1	3	3	24
210	D-3	AC23	695	96	20.3	2	3	3	22
675	D-2	AC24	696	64	28.8	2	3	3	27
697	D-3	AD1	697	253	39	3	9	9	30
260	D-1	AD2	698	133	26	1	3	3	21
511	D-3	AD3	699	322	40	5	5	5	27
524	D-2	AD4	700	57	32.4	0	3	5	DEAD
190	D-2	AD5	701	122	38	1	4	4	28
182	D-3	AD6	702	303	23.2	4	4	4	23
727	D-3	AD7	703	115	27	1	4	4	24
481	D-2	AD8	704	249	47.4	0	7	7	32
197	D-3	AD9	705	189	18	3	5	5	28
188	D-3	AD10	706	DEAD	DEAD	DEAD	DEAD	DEAD	22
402	D-2	AD11	707	138	36.9	1	4	4	26
626	D-3	AD12	708	DEAD	DEAD	DEAD	DEAD	DEAD	DEAD
76	D-3	AD13	709	233	37.4	4	2	2	26
497	D-2	AD14	710	175	22	2	3	3	24
463	D-2	AD15	711	84	30.4	0	3	3	27
194	D-3	AD16	712	229	33	4	4	4	27
109	D-1	AD17	713	117	34.2	2	5	5	27
133	D-1	AD18	714	181	27.1	2	6	6	31
267	D-1	AD19	715	174	30	2	4	4	26
95	D-1	AD20	716	99	39.1	1	5	7	31
257	D-2	AD21	717	71	31	2	3	3	26
218	D-2	AD22	718	151	24	2	2	2	22
38	D-3	AD23	719	243	34	4	3	3	24
151	D-2	AD24	720	170	23.5	2	2	2	22
883	D-2	AE1	721	DEAD	DEAD	DEAD	DEAD	DEAD	23
625	D-3	AE2	722	170	16	2	5	5	26

115	D-3	AE3	723	114	18	2	3	3	21
555	D-1	AE4	724	119	31	0	4	4	23
162	D-1	AE5	725	109	38	0	5	5	27
224	D-1	AE6	726	98	30.8	0	4	4	23
543	D-2	AE7	727	144	46	1	5	5	31
400	D-1	AE8	728	166	39.2	2	4	4	25
489	D-1	AE9	729	114	37.5	2	3	3	23
358	D-3	AE10	730	55	11	2	2	2	22
732	D-2	AE11	731	109	32	2	3	3	26
12	D-3	AE12	732	153	35	2	3	3	25
87	D-2	AE13	733	132	33	1	2	2	24
121	D-1	AE14	734	190	44.5	3	4	4	27
106	D-1	AE15	735	167	40	0	6	6	31
185	D-2	AE16	736	85	36	0	5	9	31
462	D-2	AE17	737	203	31	2	3	3	25
691	D-3	AE18	738	156	38	2	3	3	27
222	D-2	AE19	739	84	30	3	4	4	23
828	D-1	AE20	740	DEAD	DEAD	DEAD	DEAD	DEAD	DEAD
264	D-2	AE21	741	135	43.3	0	8	8	32
665	D-3	AE22	742	200	29.7	2	3	3	23
100	D-3	AE23	743	89	18	0	5	5	29
118	D-2	AE24	744	94	24.5	0	3	3	24
464	D-3	AF1	745	182	32	2	4	4	24
116	D-1	AF2	746	121	26.8	3	3	3	26
28	D-2	AF3	747	100	20	1	3	3	21
190	D-1	AF4	748	134	31	2	4	4	28
429	D-2	AF5	749	185	38	2	4	4	26
180	D-1	AF6	750	53	28	1	7	7	30
233	D-2	AF7	751	165	34	3	3	3	22
89	D-1	AF8	752	184	31	2	4	4	23
555	D-3	AF9	753	35	9	2	0	0	23
596	D-3	AF10	754	132	33	1	3	3	27
691	D-2	AF11	755	DEAD	DEAD	DEAD	DEAD	DEAD	23

67	D-2	AF12	756	98	26	1	3	3	24
147	D-1	AF13	757	161	41	3	4	4	25
125	D-3	AF14	758	182	55	1	6	6	31
564	D-3	AF15	759	109	36.9	0	3	4	30
617	D-3	AF16	760	152	39.9	0	7	7	32
212	D-3	AF17	761	130	29.3	0	5	5	29
271	D-3	AF18	762	80	20.5	4	4	4	29
414	D-2	AF19	763	131	18	0	6	8	33
252	D-3	AF20	764	124	32.1	0	3	3	22
30	D-3	AF21	765	118	26	3	4	4	22
648	D-2	AF22	766	112	25	2	3	3	21
551	D-3	AF23	767	153	29	2	4	4	28
96	D-1	AF24	768	113	25	3	3	3	28
607	D-3	AG1	769	92	14	4	3	3	26
441	D-2	AG2	770	86	38	0	5	5	27
80	D-1	AG3	771	91	37.1	0	5	6	27
572	D-3	AG4	772	129	42	0	5	7	33
529	D-3	AG5	773	121	30	1	4	4	26
279	D-1	AG6	774	114	16	2	3	3	22
651	D-2	AG7	775	107	32.6	1	2	2	25
672	D-2	AG8	776	145	42.1	0	5	5	29
598	D-1	AG9	777	98	40	0	4	4	30
56	D-3	AG10	778	138	41	0	4	4	25
685	D-2	AG11	779	168	37	2	3	3	25
609	D-2	AG12	780	67	40	2	3	3	24
687	D-2	AG13	781	79	12	1	2	2	22
269	D-1	AG14	782	170	39	2	5	5	28
464	D-1	AG15	783	203	39.2	2	3	3	26
501	D-3	AG16	784	94	30.7	0	3	3	26
243	D-2	AG17	785	156	30	2	5	5	27
183	D-2	AG18	786	NO	NO	NO	NO	NO	NO
726	D-1	AG19	787	125	19.8	2	3	3	26
159	D-1	AG20	788	167	31	4	2	2	20

358	D-2	AG21	789	112	34	2	3	3	24
529	D-1	AG22	790	55	26	0	4	4	26
565	D-3	AG23	791	102	26	1	4	4	25
87	D-1	AG24	792	116	32.8	0	3	3	27
178	D-2	AH1	793	156	41	2	4	4	27
658	D-1	AH2	794	131	41	0	4	6	33
239	D-2	AH3	795	80	25.2	0	3	3	23
216	D-1	AH4	796	132	23	3	4	4	25
10	D-3	AH5	797	150	39.4	0	3	3	37
687	D-3	AH6	798	DEAD	DEAD	DEAD	DEAD	DEAD	21
266	D-1	AH7	799	67	29	0	3	4	30
460	D-3	AH8	800	197	41	1	6	6	30
137	D-3	AH9	801	133	36.8	0	4	6	31
1033	D-1	AH10	802	143	19.1	2	3	3	24
520	D-3	AH11	803	90	11	2	2	2	22
648	D-3	AH12	804	11	9	3	0	0	23
54	D-1	AH13	805	104	40.5	0	5	5	29
134	D-3	AH14	806	161	27	3	2	2	22
453	D-1	AH15	807	147	40.5	2	3	3	30
469	D-1	AH16	808	81	37	0	3	7	33
498	D-2	AH17	809	147	38.2	2	4	4	27
579	D-3	AH18	810	162	34.3	2	4	4	23
68	D-1	AH19	811	188	34.2	2	4	4	23
483	D-3	AH20	812	118	33.1	3	4	4	26
331	D-1	AH21	813	42	22	3	0	2	DEAD
87	D-3	AH22	814	81	24.5	0	3	3	25
416	D-2	AH23	815	138	30.4	2	3	3	25
495	D-3	AH24	816	DEAD	DEAD	DEAD	DEAD	DEAD	22
712	D-2	AI1	817	91	33.1	0	4	4	27
436	D-1	AI2	818	108	31	1	4	4	25
603	D-3	AI3	819	46	21	3	3	3	23
855	D-2	AI4	820	81	25	2	2	2	22
143	D-3	AI5	821	100	42.1	0	4	8	38

441	D-3	AI6	822	72	26	0	3	3	26
636	D-3	AI7	823	150	22	1	4	4	26
726	D-2	AI8	824	92	21.4	0	4	4	29
524	D-1	AI9	825	162	36	0	8	8	33
449	D-3	AI10	826	139	32	1	4	4	30
244	D-3	AI11	827	143	36	3	4	4	27
491	D-2	AI12	828	51	26	0	6	6	31
528	D-3	AI13	829	DEAD	DEAD	DEAD	DEAD	DEAD	22
623	D-1	AI14	830	161	31	2	4	4	25
429	D-1	AI15	831	200	37	0	4	4	27
720	D-1	AI16	832	26	9.8	3	0	0	22
860	D-3	AI17	833	DEAD	DEAD	DEAD	DEAD	DEAD	22
519	D-2	AI18	834	145	33	0	7	7	30
100	D-2	AI19	835	DEAD	DEAD	DEAD	DEAD	DEAD	25
338	D-3	AI20	836	135	27	2	2	2	24
130	D-2	AI21	837	84	32.1	0	3	3	24
648	D-1	AI22	838	69	13	3	2	2	22
43	D-2	AI23	839	121	35	0	6	6	31
647	D-1	AI24	840	87	19.8	1	2	2	23
863	D-3	AJ1	841	189	27	1	3	3	21
222	D-1	AJ2	842	131	32	3	3	3	23
863	D-1	AJ3	843	205	27.2	3	4	4	22
489	D-2	AJ4	844	94	39.4	2	2	2	22
663	D-1	AJ5	845	146	29.5	2	3	3	22
457	D-1	AJ6	846	162	28	1	4	4	24
159	D-3	AJ7	847	120	24	2	2	2	20
271	D-1	AJ8	848	92	32.5	2	3	7	NO
71	D-1	AJ9	849	113	23	2	3	3	24
235	D-1	AJ10	850	103	36.1	0	4	4	27
510	D-2	AJ11	851	189	39.5	2	5	5	29
703	D-1	AJ12	852	136	27	1	5	5	23
27	D-3	AJ13	853	141	39.2	1	4	4	26
592	D-1	AJ14	854	181	35	1	4	4	29

659	D-2	AJ15	855	222	38.9	2	4	4	28
519	D-1	AJ16	856	142	37	0	7	7	29
141	D-2	AJ17	857	175	31.5	2	5	5	26
447	D-3	AJ18	858	115	28.7	0	6	6	28
474	D-2	AJ19	859	165	29.8	2	3	3	23
133	D-3	AJ20	860	137	28.2	2	3	3	26
492	D-3	AJ21	861	151	36	1	4	4	24
106	D-3	AJ22	862	144	37	0	6	6	31
476	D-1	AJ23	863	146	33.1	1	3	3	26
164	D-1	AJ24	864	114	30.5	1	3	3	22
482	D-1	AK1	865	122	34.1	0	5	5	30
831	D-2	AK2	866	79	21.4	1	2	2	22
465	D-2	AK3	867	152	38.7	2	3	3	26
177	D-3	AK4	868	83	29	0	4	4	26
608	D-3	AK5	869	86	30.6	0	6	6	29
888	D-2	AK6	870	81	24	1	3	3	26
177	D-2	AK7	871	89	27	1	4	4	24
98	D-1	AK8	872	202	32	2	4	4	27
156	D-2	AK9	873	106	42.5	2	3	3	24
167	D-1	AK10	874	71	28	0	4	4	24
191	D-3	AK11	875	45	17.2	2	3	3	23
187	D-3	AK12	876	112	25	2	5	5	24
528	D-1	AK13	877	152	33.2	2	3	3	23
712	D-1	AK14	878	93	44	2	3	3	30
627	D-1	AK15	879	84	38.8	2	2	2	27
500	D-3	AK16	880	79	40	0	4	4	29
513	D-3	AK17	881	62	29	0	3	3	22
85	D-3	AK18	882	42	36	0	4	4	37
636	D-2	AK19	883	97	26	1	4	4	25
275	D-2	AK20	884	87	29	3	3	3	24
498	D-3	AK21	885	59	46	2	3	3	26
453	D-3	AK22	886	118	34.6	0	5	5	29
259	D-2	AK23	887	93	29.2	0	5	5	28

134	D-2	AK24	888	77	23	1	3	3	24
636	D-1	AL1	889	105	32	2	3	3	26
579	D-2	AL2	890	116	39	1	4	4	23
43	D-3	AL3	891	79	26	0	7	7	30
65	D-1	AL4	892	82	33	0	4	5	26
169	D-2	AL5	893	176	35.1	3	4	4	24
575	D-3	AL6	894	102	33	3	4	4	25
4	D-2	AL7	895	67	21.5	1	5	5	29
249	D-2	AL8	896	134	39	2	7	7	29
452	D-2	AL9	897	204	52	2	4	4	29
491	D-3	AL10	898	81	38	0	5	7	30
147	D-2	AL11	899	123	43.6	0	3	3	25
269	D-2	AL12	900	131	43	2	7	7	30
449	D-1	AL13	901	86	44	0	6	6	31
439	D-2	AL14	902	74	34.2	0	1	8	33
483	D-2	AL15	903	53	29	0	6	6	29
849	D-1	AL16	904	68	26	2	3	3	23
218	D-1	AL17	905	104	36	2	2	2	24
479	D-3	AL18	906	96	38	2	3	3	27
91	D-3	AL19	907	107	31.8	4	4	4	25
558	D-3	AL20	908	136	38	1	3	3	26
465	D-3	AL21	909	98	34	3	3	3	23
427	D-2	AL22	910	103	41	2	5	5	26
435	D-2	AL23	911	99	36.3	0	4	4	26
223	D-2	AL24	912	81	27	0	4	4	25
512	D-1	AM1	913	142	26.5	2	3	3	26
25	D-2	AM2	914	212	45.5	1	6	6	28
18	D-2	AM3	915	128	28.1	0	5	5	26
409	D-1	AM4	916	69	26	0	4	6	31
469	D-3	AM5	917	140	17	0	7	8	30
432	D-3	AM6	918	85	11	1	4	4	23
220	D-2	AM7	919	118	34	0	5	7	30
21	D-1	AM8	920	NO	NO	NO	NO	NO	NO

428	D-1	AM9	921	153	31.5	0	6	6	27
497	D-3	AM10	922	132	35	1	3	3	22
639	D-3	AM11	923	138	35.4	0	6	7	28
534	D-1	AM12	924	35	17	0	0	9	30
432	D-2	AM13	925	227	20	4	4	4	24
265	D-2	AM14	926	188	44.8	3	3	3	24
476	D-3	AM15	927	209	30.7	4	5	5	27
883	D-1	AM16	928	109	38	0	3	3	27
647	D-2	AM17	929	97	23	0	3	3	23
210	D-1	AM18	930	85	13.4	0	3	3	22
54	D-3	AM19	931	129	35.8	0	5	5	27
72	D-2	AM20	932	135	29	0	5	5	25
663	D-2	AM21	933	200	31.5	2	5	5	25
214	D-1	AM22	934	194	21.3	3	3	3	24
440	D-3	AM23	935	144	32	2	5	5	25
332	D-1	AM24	936	51	19	0	4	4	25
609	D-1	AN1	937	131	34	1	3	3	24
447	D-1	AN2	938	137	30	1	5	5	27
163	D-3	AN3	939	28	29.1	0	0	1	30
80	D-2	AN4	940	203	40	0	6	6	28
279	D-2	AN5	941	101	13	0	3	3	24
26	D-1	AN6	942	132	35	0	4	4	29
100	D-1	AN7	943	39	21	0	6	6	30
169	D-3	AN8	944	128	33	3	4	4	24
257	D-3	AN9	945	44	27	1	2	2	28
126	D-1	AN10	946	127	33	0	5	7	30
445	D-1	AN11	947	120	30.5	0	7	7	29
199	D-2	AN12	948	96	26	1	4	4	25
505	D-2	AN13	949	71	22.5	2	3	3	24
98	D-3	AN14	950	261	33	3	4	4	28
686	D-2	AN15	951	160	37	3	3	3	26
180	D-2	AN16	952	78	21.2	0	7	7	29
481	D-3	AN17	953	86	32.5	0	4	7	33

854	D-1	AN18	954	NO	NO	NO	NO	NO	23	
411	D-2	AN19	955	71	36	0	3	6	33	
104	D-2	AN20	956	83	9.8	2	2	2	22	
451	D-3	AN21	957	169	30.8	2	5	5	24	
480	D-1	AN22	958	140	24	0	4	4	24	
94	D-2	AN23	959	126	30.1	0	4	4	28	
116	D-3	AN24	960	107	25	0	4	4	28	
448	D-2	AO1	961	156	32.6	3	4	4	27	
1021	D-1	AO2	962	204	36.5	0	6	6	28	
267	D-2	AO3	963	82	30.4	0	7	7	27	
525	D-1	AO4	964	143	39	0	5	5	29	
434	D-3	AO5	965	112	42	1	4	4	25	
178	D-1	AO6	966	78	25	1	3	3	22	
22	D-1	AO7	967	113	35	2	3	3	26	
53	D-3	AO8	968	124	33	3	5	5	25	
567	D-1	AO9	969	98	29	0	4	7	32	
166	D-1	AO10	970	101	34	1	3	3	24	
219	D-3	AO11	971	136	39.6	0	3	5	27	
56	D-2	AO12	972	NO	NO	NO	NO	NO	NO	
855	D-1	AO13	973	71	22	1	3	3	23	
73	D-1	AO14	974	97	34	2	5	5	24	
400	D-3	AO15	975	151	44.5	4	3	3	24	
136	D-2	AO16	976	126	25.6	0	6	6	30	
666	D-2	AO17	977	124	33	0	6	6	33	
261	D-2	AO18	978	104	32	1	3	3	22	
445	D-3	AO19	979	116	33	0	5	5	29	
27	D-2	AO20	980	99	23.5	0	3	3	29	
165	D-3	AO21	981	147	33.4	2	4	4	26	
837	D-1	AO22	982	133	36.2	2	4	4	27	
461	D-1	AO23	983	0	25.5	0	3	4	27	
332	D-2	AO24	984	86	19	0	3	3	26	
266	D-2	AP1	985	98	33.1	1	4	4	28	
402	D-1	AP2	986	133	34	2	4	4	25	

107	D-1	AP3	987	199	39	0	7	7	32
410	D-1	AP4	988	105	31	2	2	2	22
22	D-2	AP5	989	149	26	0	3	3	23
185	D-1	AP6	990	113	26	0	5	8	30
833	D-3	AP7	991	166	24	3	3	3	26
225	D-2	AP8	992	138	27	2	3	3	22
593	D-1	AP9	993	113	25	0	4	4	24
94	D-3	AP10	994	131	25.3	0	4	4	24
721	D-3	AP11	995	169	40	0	5	5	31
606	D-1	AP12	996	102	22	2	4	4	23
77	D-2	AP13	997	107	26.2	0	4	4	27
565	D-1	AP14	998	160	29.8	2	3	3	25
183	D-1	AP15	999	37	33.8	2	2	2	NO
190	D-3	AP16	1000	127	32.5	1	4	4	27
32	D-3	AP17	1001	80	12	1	2	2	26
435	D-3	AP18	1002	120	32	1	4	4	25
34	D-3	AP19	1003	227	32	1	7	7	27
1	D-3	AP20	1004	161	20	5	3	3	20
567	D-2	AP21	1005	139	36	0	5	5	31
199	D-1	AP22	1006	111	29	1	3	3	24
471	D-3	AP23	1007	127	31	3	5	5	29
469	D-2	AP24	1008	125	15	1	4	4	28
473	D-3	AQ1	1009	236	29	3	4	4	22
261	D-3	AQ2	1010	136	34	2	2	2	23
170	D-3	AQ3	1011	72	15.3	1	4	4	23
355	D-3	AQ4	1012	138	26	0	6	6	27
111	D-1	AQ5	1013	DEAD	DEAD	DEAD	DEAD	DEAD	23
823	D-3	AQ6	1014	239					24
141	D-3	AQ7	1015	126	26.6	0	6	8	25
626	D-2	AQ8	1016	167	30	3	4	4	27
455	D-2	AQ9	1017	111	42	1	4	4	29
237	D-3	AQ10	1018	138	22.7	0	4	4	26
651	D-3	AQ11	1019	82	20.9	0	4	4	24

348	D-3	AQ12	1020	121	33.4	1	5	5	30
180	D-3	AQ13	1021	66	43	1	4	4	29
477	D-1	AQ14	1022	157	39.5	0	5	5	27
505	D-3	AQ15	1023	107	20.3	1	3	3	22
52	D-2	AQ16	1024	98	24	0	3	3	23
658	D-3	AQ17	1025	144	34	0	5	9	33
500	D-2	AQ18	1026	85	28	1	5	5	30
722	D-1	AQ19	1027	DEAD	DEAD	DEAD	DEAD	DEAD	DEAD
547	D-2	AQ20	1028	119	27	0	3	3	24
620	D-1	AQ21	1029	84	37.2	0	3	3	29
254	D-2	AQ22	1030	102	26	3	3	3	23
736	D-3	AQ23	1031	114	31	0	6	7	31
163	D-1	AQ24	1032	50	41	0	2	3	30
136	D-1	AR1	1033	95	29.5	0	3	3	25
427	D-1	AR2	1034	67	30	0	4	4	25
465	D-1	AR3	1035	84	27	1	4	4	23
126	D-2	AR4	1036	37	19	0	4	4	30
259	D-1	AR5	1037	69	33	0	5	5	28
533	D-1	AR6	1038	45	22	0	2	2	23
485	D-1	AR7	1039	154	15.3	0	5	5	32
835	D-2	AR8	1040	119	34	0	5	5	25
347	D-2	AR9	1041	96	23	0	4	4	25
686	D-1	AR10	1042	DEAD	DEAD	DEAD	DEAD	DEAD	24
620	D-3	AR11	1043	62	31	0	3	3	31
52	D-3	AR12	1044	43	7	0	3	3	23
437	D-2	AR13	1045	76	26	1	4	4	25
267	D-3	AR14	1046	42	34	0	2	6	32
179	D-2	AR15	1047	78	23	2	3	3	21
336	D-2	AR16	1048	71	15	0	5	5	23
402	D-3	AR17	1049	49	24.4	0	4	4	24
416	D-1	AR18	1050	134	31.7	0	4	4	24
703	D-3	AR19	1051	142	26.8	3	4	4	27
238	D-1	AR20	1052	DEAD	DEAD	DEAD	DEAD	DEAD	25

408	D-2	AR21	1053	149	32.3	0	5	5	27	
214	D-2	AR22	1054	64	14.6	1	4	4	22	
551	D-2	AR23	1055	DEAD	DEAD	DEAD	DEAD	DEAD	DEAD	
666	D-1	AR24	1056	DEAD	DEAD	DEAD	DEAD	DEAD	DEAD	
109	D-2	AS1	1057	61	Top broken		1	2	2	25
58	D-2	AS2	1058	165	25.2	3	4	4	24	
17	D-1	AS3	1059	18	20	3	4	4	25	
607	D-1	AS4	1060	137	14	0	4	4	27	
29	D-1	AS5	1061	202	36	3	4	4	24	
228	D-1	AS6	1062	115	25	0	3	3	23	
639	D-1	AS7	1063	147	Top broken		3	1	0	24
59	D-1	AS8	1064	200	25.7	6	4	4	25	
177	D-1	AS9	1065	176	32	2	5	5	25	
712	D-3	AS10	1066	102	38.4	0	5	5	29	
415	D-1	AS11	1067	228	27	2	2	2	20	
541	D-2	AS12	1068	160	33.5	2	3	3	26	
191	D-1	AS13	1069	135	27	2	3	3	25	
687	D-1	AS14	1070	81	15.5	0	4	4	23	
860	D-2	AS15	1071	149	30.8	0	4	4	24	
198	D-3	AS16	1072	158	41	0	5	5	33	
573	D-2	AS17	1073	125	33.9	1	4	4	27	
239	D-1	AS18	1074	89	26.2	1	3	3	22	
495	D-1	AS19	1075	125	32	2	3	3	22	
860	D-1	AS20	1076	196	22.5	2	4	4	23	
615	D-2	AS21	1077	135	30.5	2	3	3	22	
46	D-3	AS22	1078	159	29	1	2	2	21	
158	D-3	AS23	1079	76	23	2	4	4	28	
258	D-2	AS24	1080	151	43	0	4	4	28	
732	D-1	AT1	1081	160	25	2	3	3	23	
530	D-2	AT2	1082	156	31.3	2	5	5	27	
849	D-2	AT3	1083	71	14	4	0	0	21	
365	D-3	AT4	1084	127	38.6	3	4	4	29	
422	D-3	AT5	1085	125	21.1	2	2	2	21	

42	D-3	AT6	1086	69	23	0	3	3	22
419	D-1	AT7	1087	163	28	2	6	6	30
128	D-2	AT8	1088	229	49	0	5	5	41
492	D-1	AT9	1089	130	33	1	3	3	25
270	D-3	AT10	1090	145	35	2	3	3	28
28	D-3	AT11	1091	223	18	2	3	3	23
444	D-2	AT12	1092	142	33.6	0	3	3	25
477	D-2	AT13	1093	155	34	0	5	5	27
77	D-1	AT14	1094	246	42	4	5	5	26
103	D-3	AT15	1095	197	39.4	1	6	6	30
424	D-3	AT16	1096	138	37	2	3	3	26
448	D-1	AT17	1097	271	36.2	4	3	3	26
170	D-1	AT18	1098	163	17	2	2	2	22
691	D-1	AT19	1099	219	38.5	2	4	4	26
408	D-1	AT20	1100	270	46	5	4	4	26
57	D-2	AT21	1101	147	32.5	1	5	5	26
1039	D-2	AT22	1102	149	26	0	4	4	24
26	D-2	AT23	1103	131	41	0	5	5	29
188	D-1	AT24	1104	246	24.5	2	4	4	23
104	D-3	AU1	1105	136	25	2	3	3	21
9	D-2	AU2	1106	NO	NO	NO	NO	NO	NO
65	D-3	AU3	1107	143	38.5	2	4	4	24
580	D-3	AU4	1108	66	33.2	1	4	4	24
558	D-2	AU5	1109	94	32.8	2	3	3	23
254	D-3	AU6	1110	41	22	2	2	2	22
510	D-1	AU7	1111	106	44	1	5	5	29
215	D-3	AU8	1112	52	17.5	3	3	3	24
835	D-3	AU9	1113	157	38.7	2	5	5	24
572	D-2	AU10	1114	124	34.5	0	7	7	30
265	D-3	AU11	1115	137	37.4	2	3	3	25
592	D-2	AU12	1116	149	37.5	0	5	5	31
73	D-3	AU13	1117	156	32.1	4	4	4	24
564	D-1	AU14	1118	184	47	2	2	2	26

560	D-1	AU15	1119	91	31.5	3	2	2	22	
107	D-2	AU16	1120	161	39.1	0	6	8	31	
77	D-3	AU17	1121	173	43	5	3	3	26	
557	D-3	AU18	1122	102	30	5	2	2	24	
569	D-2	AU19	1123	22	13	0	4	4	43	
520	D-1	AU20	1124	69	33	0	5	5	22	
664	D-3	AU21	1125	131	40.8	2	4	4	28	
365	D-1	AU22	1126	142	40	2	4	4	27	
530	D-1	AU23	1127	63	28	0	4	4	27	
111	D-2	AU24	1128	64	20.2	1	4	4	26	
24	D-1	AV1	1129	226	22.8	2	6	6	22	
242	D-1	AV2	1130	148	38	2	5	5	25	
290	D-2	AV3	1131	87	29.5	3	4	4	24	
133	D-2	AV4	1132	140	21	1	7	7	29	
25	D-3	AV5	1133	55	21	1	4	4	26	
6	D-1	AV6	1134	268	40.3	0	6	6	33	
525	D-2	AV7	1135	135	33	3	5	5	29	
186	D-3	AV8	1136	133	34.1	2	2	2	27	
179	D-3	AV9	1137	145	26	3	2	2	22	
828	D-2	AV10	1138	139	34.8	0	6	7	29	
554	D-2	AV11	1139	96	31.2	1	3	3	24	
589	D-2	AV12	1140	113	26.1	0	5	5	23	
264	D-3	AV13	1141	157	35.6	0	6	6	30	
290	D-3	AV14	1142	162	34	3	3	3	25	
573	D-1	AV15	1143	171	35	0	5	5	26	
658	D-2	AV16	1144	145	44	0	5	6	32	
450	D-1	AV17	1145	187	40.4	1	3	3	24	
232	D-3	AV18	1146	108	32.5	1	3	3	25	
593	D-2	AV19	1147	102	30.5	1	4	4	24	
269	D-3	AV20	1148	136	36	2	4	4	27	
553	D-3	AV21	1149	142	35	3	3	3	26	
652	D-3	AV22	1150	129	32.8	2	3	3	26	
91	D-1	AV23	1151	131	32	1	4	4	25	

168	D-3	AV24	1152	146	27	1	4	4	26
1021	D-2	AW1	1153	165	38	0	7	7	27
363	D-2	AW2	1154	174	39	1	4	4	28
65	D-2	AW3	1155	180	37	2	3	3	25
17	D-3	AW4	1156	26	54.2	5	4	4	26
223	D-1	AW5	1157	121	34	3	5	5	26
501	D-2	AW6	1158	143	46.6	0	4	4	26
581	D-3	AW7	1159	181	38	0	8	8	30
525	D-3	AW8	1160	168	38	4	4	4	30
888	D-3	AW9	1161	152	31.2	2	3	3	25
29	D-2	AW10	1162	142	34	4	5	5	27
92	D-2	AW11	1163	245	39.5	4	3	3	26
451	D-2	AW12	1164	191	32	4	3	3	23
854	D-2	AW13	1165	162	34.3	3	2	2	24
338	D-1	AW14	1166	256	35	3	4	4	24
238	D-2	AW15	1167	155	32.1	3	3	3	26
697	D-2	AW16	1168	169	32	1	7	7	30
243	D-3	AW17	1169	199	30	3	6	6	26
506	D-2	AW18	1170	120	33.8	0	6	6	30
590	D-2	AW19	1171	49	16	0	4	4	26
175	D-3	AW20	1172	146	34.4	0	5	5	25
498	D-1	AW21	1173	120	44	2	3	3	27
48	D-2	AW22	1174	159	33.5	2	4	4	26
413	D-3	AW23	1175	282	20.5	2	4	4	24
442	D-2	AW24	1176	127	25.7	1	3	3	23
557	D-2	AX1	1177	151	33.8	5	3	3	23
494	D-2	AX2	1178	146	36	2	7	7	30
21	D-2	AX3	1179	NO	NO	NO	NO	NO	NO
481	D-1	AX4	1180	DEAD	DEAD	DEAD	DEAD	DEAD	NO
627	D-3	AX5	1181	168	37.2	2	4	4	26
486	D-1	AX6	1182	152	35	2	5	5	25
216	D-3	AX7	1183	136	27	2	4	4	25
230	D-1	AX8	1184	192	45	1	3	3	29

606	D-2	AX9	1185	146	35	1	5	5	24
341	D-2	AX10	1186	163	35	1	5	5	29
483	D-1	AX11	1187	152	36.6	3	4	4	28
661	D-2	AX12	1188	187	40	0	6	6	29
419	D-2	AX13	1189	181	38	4	3	3	27
89	D-2	AX14	1190	138	33.2	3	3	3	22
732	D-3	AX15	1191	126	32.5	2	4	4	25
569	D-3	AX16	1192	129	45	0	4	9	34
194	D-1	AX17	1193	129	36	3	4	4	25
413	D-1	AX18	1194	93	23	3	5	5	27
598	D-2	AX19	1195	DEAD	DEAD	DEAD	DEAD	DEAD	DEAD
78	D-3	AX20	1196	101	43	3	3	3	29
7	D-3	AX21	1197	63	30	1	3	3	25
145	D-2	AX22	1198	176	42.1	0	5	6	29
520	D-2	AX23	1199	114	32	1	5	5	21
505	D-1	AX24	1200	21	9	1	1	1	22
237	W-3	AY1	1201	158	44	3	3	3	21
140	W-1	AY2	1202	NO	NO	NO	NO	NO	NO
257	W-1	AY3	1203	82	32	2	3	3	24
91	W-1	AY4	1204	237	39	3	3	3	25
565	W-1	AY5	1205	235	33	3	3	3	23
167	W-3	AY6	1206	NO	NO	NO	NO	NO	NO
220	W-2	AY7	1207	189	39.2	2	5	5	28
420	W-2	AY8	1208	237	51	4	3	3	24
34	W-3	AY9	1209	264	51.2	3	5	5	26
837	W-2	AY10	1210	192	55.5	4	4	4	28
262	W-3	AY11	1211	179	58.5	4	4	4	26
72	W-3	AY12	1212	181	41.5	2	4	4	22
1032	W-1	AY13	1213	220	26	1	3	3	25
75	W-2	AY14	1214	348	43	3	6	6	38
665	W-2	AY15	1215	291	55.5	3	3	3	22
945	W-3	AY16	1216	269	42	2	3	3	22
156	W-2	AY17	1217	129	55	3	1	1	25

219	W-3	AY18	1218	151	54.5	2	3	3	29
442	W-1	AY19	1219	298	50.6	2	4	4	23
365	W-3	AY20	1220	104	46.2	2	3	3	27
176	W-2	AY21	1221	217	53.2	2	3	3	25
615	W-1	AY22	1222	311	43.5	3	3	3	21
835	W-2	AY23	1223	212	54	3	4	4	25
233	W-2	AY24	1224	216	47	2	3	3	22
720	W-3	AZ1	1225	319	40.5	5	3	3	25
688	W-1	AZ2	1226	NO	NO	NO	NO	NO	NO
92	W-1	AZ3	1227	267	32.3	6	3	3	34
17	W-1	AZ4	1228	527	71	3	3	3	29
177	W-2	AZ5	1229	79	33.5	0	2	2	25
455	W-3	AZ6	1230	195	44.5	2	2	2	24
279	W-1	AZ7	1231	190	19.8	3	3	3	22
199	W-3	AZ8	1232	175	43.3	3	4	4	26
437	W-3	AZ9	1233	207	46.8	3	2	2	26
712	W-3	AZ10	1234	NO	NO	NO	NO	NO	NO
186	W-3	AZ11	1235	209	44	3	4	4	25
24	W-1	AZ12	1236	402	33.1	3	4	4	20
260	W-2	AZ13	1237	117	33	0	3	3	23
131	W-1	AZ14	1238	103	45	4	9	9	37
425	W-1	AZ15	1239	338	49	5	3	3	24
593	W-2	AZ16	1240	216	48	5	6	6	27
259	W-3	AZ17	1241	131	51.5	1	5	5	28
34	W-1	AZ18	1242	289	43	1	9	9	29
32	W-1	AZ19	1243	356	25	5	4	4	24
42	W-1	AZ20	1244	287	46.8	4	3	3	23
230	W-3	AZ21	1245	181	41	2	5	5	28
28	W-3	AZ22	1246	229	28.7	3	2	2	21
47	W-1	AZ23	1247	238	42.5	3	2	2	22
573	W-3	AZ24	1248	222	46.6	3	4	4	26
212	W-3	BA1	1249	168	42	3	5	5	25
566	W-3	BA2	1250	253	40.5	5	2	2	22

572	W-2	BA3	1251	37	44	1	3	3	34
225	W-2	BA4	1252	150	31.2	5			22
168	W-1	BA5	1253	178	42.2	3	4	4	25
703	W-3	BA6	1254	210	36	4	3	3	21
162	W-2	BA7	1255	182	47.5	2	3	3	26
58	W-3	BA8	1256	267	39	5	3	3	24
457	W-1	BA9	1257	140	54.2	1	4	4	26
849	W-2	BA10	1258	175	42.5	3	3	3	22
194	W-2	BA11	1259	164	45.4	4	3	3	23
89	W-3	BA12	1260	206	41.2	2	3	3	21
43	W-3	BA13	1261	210	47	1	5	5	28
178	W-3	BA14	1262	198	43	2	3	3	19
71	W-2	BA15	1263	107	24	1	4	4	22
464	W-3	BA16	1264	238	50.5	4	2	2	22
220	W-3	BA17	1265	166	40.8	2	5	5	28
623	W-2	BA18	1266	238	42.5	3	3	3	23
84	W-2	BA19	1267	244	28	3	4	4	23
136	W-2	BA20	1268	233	44	5	4	4	29
639	W-3	BA21	1269	199	52	3	4	4	28
1	W-1	BA22	1270	266	43.6	5	3	3	21
260	W-3	BA23	1271	159	42	1	4	4	20
560	W-3	BA24	1272	294	39	3	3	3	20
163	W-1	BB1	1273	99	50	1	2	2	28
290	W-1	BB2	1274	263	43	4	2	2	26
557	W-1	BB3	1275	432	38	7	4	4	28
365	W-1	BB4	1276	257	53.4	4	3	3	26
18	W-1	BB5	1277	303	50.2	3	3	3	21
44	W-2	BB6	1278	240	52	2	3	3	24
429	W-3	BB7	1279	272	43.1	3	4	4	26
452	W-2	BB8	1280	183	46	2	6	6	32
167	W-1	BB9	1281	83	NO	NO	NO	NO	NO
76	W-1	BB10	1282	170	46	3	3	3	26
435	W-1	BB11	1283	249	52	2	2	2	27

218	W-2	BB12	1284	160	42.6	5	2	2	31	
707	W-3	BB13	1285	242	50	2	4	4	31	
77	W-3	BB14	1286	250	51	4	4	4	28	
639	W-1	BB15	1287	312	61	3	3	3	26	
581	W-3	BB16	1288	264	48.5	0	7	7	33	
422	W-3	BB17	1289	263	44	2	3	3	23	
651	W-2	BB18	1290	252	46.5	4	3	3	25	
446	W-3	BB19	1291	148	41	2	5	5	30	
89	W-2	BB20	1292	256	41	2	2	2	21	
44	W-1	BB21	1293	298	56	3	3	3	23	
402	W-3	BB22	1294	244	57.6	4	2	2	25	
336	W-2	BB23	1295	261	35	3	4	4	22	
222	W-3	BB24	1296	215	42	1	4	4	25	
685	W-3	BC1	1297	347	51.1	5	3	3	25	
424	W-2	BC2	1298	183	47.3	0	4	4	27	
228	W-1	BC3	1299	210	45	4	3	3	24	
141	W-1	BC4	1300	252	43	3	4	4	26	
598	W-2	BC5	1301	156	47.4	0	4	4	27	
300	W-1	BC6	1302	191	35	3	3	3	22	
164	W-1	BC7	1303	185	45	1	2	4	23	
831	W-3	BC8	1304	247	48	5	3	3	26	
232	W-2	BC9	1305	205	46.8	2	4	4	25	
87	W-2	BC10	1306	167	52	1	4	4	26	
661	W-1	BC11	1307	205	27	2	4	4	25	
654	W-3	BC12	1308	214	62.8	0	7	7	32	
354	W-2	BC13	1309	292	44	6	6	6	28	
581	W-1	BC14	1310	310	47.4	2	6	6	29	
197	W-1	BC15	1311	203	25	3	4	4	24	
806	W-3	BC16	1312	266	47.5	3	5	5	24	
44	W-3	BC17	1313	106	42	0	3	3	24	
24	W-2	BC18	1314	350	33.4	4	4	4	20	
440	W-2	BC19	1315	263	56	4	4	4	24	
663	W-3	BC20	1316	219	52	2	3	3	22	

176	W-1	BC21	1317	182	51	0	4	4	25
602	W-3	BC22	1318	166	47.5	3	3	3	23
575	W-2	BC23	1319	206	47	2	3	3	25
860	W-3	BC24	1320	281	47.8	4	3	5	27
482	W-2	BD1	1321	215	53	4	5	5	32
222	W-1	BD2	1322	207	40	4	3	3	22
400	W-1	BD3	1323	196	33	11	2	2	23
513	W-2	BD4	1324	178	44.5	2	3	3	22
608	W-3	BD5	1325	213	54.5	4	4	4	27
497	W-3	BD6	1326	127	47	3	4	4	21
596	W-3	BD7	1327	171	42	4	3	3	29
219	W-2	BD8	1328	128	56	1	4	4	27
420	W-3	BD9	1329	228	47.5	2	2	2	25
603	W-2	BD10	1330	170	48	3	3	3	22
72	W-2	BD11	1331	133	40	3	2	2	26
555	W-2	BD12	1332	197	44	2	4	4	22
140	W-3	BD13	1333	152	46.3	4	3	3	29
448	W-1	BD14	1334	253	45.9	4	3	3	26
179	W-2	BD15	1335	309	41	3	3	3	20
244	W-1	BD16	1336	167	49	3	3	3	23
175	W-1	BD17	1337	215	46	2	3	3	23
232	W-3	BD18	1338	136	43	2	3	3	24
244	W-3	BD19	1339	149	50	3	3	3	23
7	W-3	BD20	1340	54	39	0	2	2	28
945	W-1	BD21	1341	236	43	4	6	6	23
427	W-3	BD22	1342	161	56.1	3	3	3	25
448	W-3	BD23	1343	216	44.4	3	3	3	26
107	W-1	BD24	1344	178	53.2	0	5	5	30
503	W-2	BE1	1345	125	48.2	2	2	2	27
1033	W-1	BE2	1346	284	51.5	4	3	3	24
59	W-2	BE3	1347	205	50	3	2	2	23
254	W-3	BE4	1348	312	39.6	6	3	3	20
273	W-1	BE5	1349	86	41	1	4	4	24

534	W-2	BE6	1350	128	54	0	6	6	28
592	W-2	BE7	1351	219	40.2	3	4	4	28
261	W-2	BE8	1352	208	51	3	4	4	23
732	W-3	BE9	1353	221	40.5	4	3	3	28
1021	W-3	BE10	1354	244	49.9	1	5	5	24
721	W-1	BE11	1355	183	46	1	4	4	27
104	W-1	BE12	1356	317	46.3	3	3	3	21
709	W-1	BE13	1357	201	49	3	4	4	25
272	W-2	BE14	1358	214	51	3	3	3	25
496	W-1	BE15	1359	100	27	4	6	6	31
524	W-2	BE16	1360	176	47.2	0	4	4	32
665	W-1	BE17	1361	242	51	3	2	2	21
290	W-2	BE18	1362	208	50.3	4	3	3	21
413	W-3	BE19	1363	159	28.7	4	3	3	26
483	W-1	BE20	1364	171	41	4	3	3	24
261	W-1	BE21	1365	82	37.4	2	3	3	25
140	W-2	BE22	1366	198	54	4	3	3	26
519	W-3	BE23	1367	207	50.6	3	6	6	27
738	W-3	BE24	1368	142	47.5	0	5	5	26
1033	W-2	BF1	1369	195	50.6	4	3	3	26
703	W-2	BF2	1370	223	36	6	2	2	22
246	W-1	BF3	1371	85					30
286	W-1	BF4	1372	156	54.3	2	2	2	23
437	W-2	BF5	1373	141	42	3	3	3	26
425	W-2	BF6	1374	198	42	4	2	2	24
218	W-1	BF7	1375	213	46.1	3	2	2	22
302	W-3	BF8	1376	189					35
648	W-3	BF9	1377	135	43	1	3	3	26
249	W-3	BF10	1378	174	48.5	1	6	6	28
541	W-2	BF11	1379	166	31.5	3	4	4	27
727	W-1	BF12	1380	206	52	3	6	6	23
563	W-2	BF13	1381	120	42	1	5	5	29
535	W-3	BF14	1382	109	51.3	0	5	6	36

114	W-1	BF15	1383	201	50	2	4	4	25	
218	W-3	BF16	1384	190	45.2	2	3	3	22	
590	W-1	BF17	1385	265	24	2	4	4	22	
198	W-1	BF18	1386	64	39	0	6	7	34	
300	W-2	BF19	1387	216	41	3	2	2	21	
165	W-3	BF20	1388	111	39	3	3	3	25	
444	W-2	BF21	1389	196	45.4	3	3	3	27	
400	W-3	BF22	1390	42	24	0	3	3	25	
590	W-3	BF23	1391	257	24.3	1	6	6	22	
71	W-3	BF24	1392	143	26	2	2	2	24	
165	W-1	BG1	1393	256	44.5	5	3	3	25	
136	W-3	BG2	1394	435	39.7	6	6	6	29	
428	W-1	BG3	1395	362	49.5	3	5	5	24	
719	W-1	BG4	1396	296	25	3	4	4	24	
414	W-2	BG5	1397	125	19	0	7	8	31	
602	W-1	BG6	1398	208	49.9	3	3	3	24	
525	W-3	BG7	1399	117	27	4	5	8	35	
427	W-2	BG8	1400	274	50.5	3	3	3	23	
197	W-3	BG9	1401	208	21	1	3	3	29	
264	W-2	BG10	1402	125	49	1	5	5	31	
155	W-2	BG11	1403	377	50.5	4	2	2	23	
199	W-1	BG12	1404	178	43.1	3	3	3	27	
354	W-1	BG13	1405	276	40	4	8	8	30	
473	W-3	BG14	1406	366	46	3	3	3	22	
497	W-1	BG15	1407	414	44	4	2	2	27	
158	W-2	BG16	1408	193	44	4	3	3	29	
71	W-1	BG17	1409	83	25.1	1	2	2	22	
281	W-1	BG18	1410	246	43.6	2	4	4	24	
506	W-3	BG19	1411	315	53	5	3	3	27	
523	W-2	BG20	1412	274	55	4	4	4	25	
165	W-2	BG21	1413	164	47.5	5	2	2	25	
1039	W-1	BG22	1414	243	53	2	4	4	26	
508	W-3	BG23	1415	171	59.1	1	6	6	26	

628	W-1	BG24	1416	122	27.5	5	3	3	25
472	W-3	BH1	1417	251	25	3	3	3	22
641	W-2	BH2	1418	237	41	3	6	6	30
185	W-3	BH3	1419	84	47	0	6	6	30
697	W-2	BH4	1420	161	47	1	4	4	29
76	W-3	BH5	1421	102	42.5	3	2	2	26
212	W-2	BH6	1422	167	38	3	5	5	25
651	W-3	BH7	1423	169	44.3	3	2	2	25
275	W-1	BH8	1424	168	33	3	3	3	32
611	W-2	BH9	1425	264	40	3	6	6	28
252	W-3	BH10	1426	168	56	4	3	3	22
596	W-2	BH11	1427	195	41	4	6	6	30
155	W-3	BH12	1428	256	49	3	4	4	25
505	W-2	BH13	1429	234	45	3	3	3	25
498	W-3	BH14	1430	246	52	3	3	3	27
429	W-1	BH15	1431	273	51	3	4	4	25
479	W-3	BH16	1432	175	59.5	3	2	2	25
1	W-2	BH17	1433	216	39	5	3	3	22
133	W-3	BH18	1434	234	26	3	5	5	31
504	W-3	BH19	1435	232	46.5	4	3	3	25
600	W-3	BH20	1436	187	54	2	3	3	26
452	W-1	BH21	1437	195	45.5	6	3	3	36
178	W-2	BH22	1438	139	52	2	3	3	24
658	W-2	BH23	1439	196	51	0	6	6	32
341	W-2	BH24	1440	158	35.5	2	2	3	35
449	W-2	BI1	1441	351	56	5	3	3	29
432	W-3	BI2	1442	204	32.5	4	3	3	24
534	W-3	BI3	1443	198	60.5	0	6	6	30
32	W-3	BI4	1444	176	28	4	5	5	27
25	W-2	BI5	1445	238	55.1	0	4	4	29
260	W-1	BI6	1446	207	41	2	5	5	20
55	W-2	BI7	1447	211	27	2	3	3	26
43	W-1	BI8	1448	244	55	2	3	3	28

444	W-1	BI9	1449	241	15	1	0	0	27
623	W-3	BI10	1450	212	47.3	3	4	4	24
279	W-3	BI11	1451	147	21.5	2	2	2	24
415	W-1	BI12	1452	263	44	4	3	3	22
600	W-1	BI13	1453	197	47	2	3	3	23
500	W-3	BI14	1454	157	55.5	2	4	4	31
281	W-3	BI15	1455	305	48	3	2	2	21
572	W-3	BI16	1456	262	55	2	6	6	32
54	W-2	BI17	1457	NO	NO	NO	NO	NO	NO
235	W-3	BI18	1458	169	44	3	4	4	27
554	W-2	BI19	1459	204	38	2	3	3	27
180	W-2	BI20	1460	156	50	0	5	5	32
188	W-1	BI21	1461	165	55	4	4	4	23
492	W-2	BI22	1462	182	49	3	4	4	25
249	W-1	BI23	1463	108	43.5	0	5	5	26
163	W-2	BI24	1464	62	50	0	3	3	30
270	W-1	BJ1	1465	107	45.5	1	2	2	25
400	W-2	BJ2	1466	143	23	12	3	3	23
855	W-2	BJ3	1467	97	31.5	2	2	2	24
491	W-1	BJ4	1468	182	40	3	6	6	26
49	W-3	BJ5	1469	179	41.5	0	7	7	28
331	W-3	BJ6	1470	166	47	4	5	5	25
648	W-1	BJ7	1471	96	43	3	3	3	22
498	W-1	BJ8	1472	264	49	3	3	3	27
348	W-3	BJ9	1473	188	44	2	5	5	25
278	W-2	BJ10	1474	223	44.9	4	3	3	28
160	W-2	BJ11	1475	194	40.3	3	4	4	26
594	W-1	BJ12	1476	183	40.2	3	3	3	26
511	W-2	BJ13	1477	176	48.5	4	5	5	25
533	W-3	BJ14	1478	152	52.5	1	5	5	28
27	W-3	BJ15	1479	348	54	4	4	4	26
301	W-3	BJ16	1480	171	43	1	5	5	28
603	W-3	BJ17	1481	188	52	0	5	5	29

258	W-2	BJ18	1482	124	31	0	4	4	26
162	W-1	BJ19	1483	151	51	3	4	4	24
136	W-1	BJ20	1484	192	47	4	5	5	27
170	W-3	BJ21	1485	183	33.2	4	3	3	22
503	W-1	BJ22	1486	134	49	1	2	2	27
591	W-2	BJ23	1487	220	47.4	5	3	3	24
594	W-2	BJ24	1488	159	43	2	3	3	27
627	W-1	BK1	1489	186	49	3	4	4	26
563	W-3	BK2	1490	145	39.5	4	3	3	27
575	W-1	BK3	1491	242	45	5	3	3	23
275	W-2	BK4	1492	133	43.1	3	2	2	20
665	W-3	BK5	1493	266	51	5	2	2	21
204	W-1	BK6	1494	63	37	1	3	3	25
555	W-1	BK7	1495	271	49	3	3	3	24
134	W-3	BK8	1496	216	40	4	4	4	22
163	W-3	BK9	1497	114	57	0	4	4	26
147	W-2	BK10	1498	202	47	3	4	4	25
257	W-2	BK11	1499	79	39	2	4	4	30
59	W-3	BK12	1500	175	46.8	2	4	4	25
302	W-2	BK13	1501	95	47.2	1	5	5	31
510	W-1	BK14	1502	173	54	1	6	6	29
474	W-2	BK15	1503	315	54	5	3	3	23
863	W-2	BK16	1504	244	47	3	3	3	23
190	W-1	BK17	1505	67	NO	NO	NO	NO	NO
697	W-1	BK18	1506	258	48	0	8	8	30
103	W-3	BK19	1507	85	33	2	6	6	28
2	W-2	BK20	1508	217	56.5	3	3	3	29
415	W-3	BK21	1509	226	42	3	3	3	23
104	W-3	BK22	1510	208	50.5	3	2	2	29
589	W-3	BK23	1511	162	53	4	4	4	23
85	W-3	BK24	1512	10	19	1	8	8	35
109	W-3	BL1	1513	238	56.5	3	4	4	26
722	W-2	BL2	1514	249	59	2	3	3	26

416	W-3	BL3	1515	186	46.8	4	4	4	25	
653	W-1	BL4	1516	187	55	3	3	3	28	
476	W-1	BL5	1517	113	39	3	2	2	28	
451	W-3	BL6	1518	210	43	4	4	4	24	
210	W-1	BL7	1519	208	28.1	3	3	3	22	
225	W-3	BL8	1520	227	46	5	3	3	23	
264	W-3	BL9	1521	301	47	2	6	6	29	
596	W-1	BL10	1522	63	35	2	2	2	26	
243	W-3	BL11	1523	266	49.5	3	5	5	27	
238	W-1	BL12	1524	181	48	3	3	3	26	
67	W-1	BL13	1525	188	41.5	3	3	3	22	
10	W-2	BL14	1526	149	57	4	2	5	33	
137	W-1	BL15	1527	242	52.1	1	5	5	29	
451	W-1	BL16	1528	258	48	3	4	4	23	
242	W-3	BL17	1529	191	60	1	5	5	27	
860	W-2	BL18	1530	232	53	2	3	3	25	
647	W-2	BL19	1531	286	46.5	4	4	4	22	
9	W-1	BL20	1532	157	50.8	2	4	4	25	
463	W-2	BL21	1533	269	53.5	2	6	6	31	
96	W-1	BL22	1534	162	Top broken		5	4	4	26
497	W-2	BL23	1535	278	45	3	3	3	22	
628	W-3	BL24	1536	160	34	4	3	3	24	
553	W-3	BM1	1537	207	43	4	3	3	26	
620	W-3	BM2	1538	147	47	2	2	2	27	
594	W-3	BM3	1539	168	44	5	3	3	27	
258	W-3	BM4	1540	4	31	3	0	0	26	
106	W-1	BM5	1541	156	37	2	4	4	29	
459	W-3	BM6	1542	181	50	1	5	5	28	
640	W-2	BM7	1543	214	44	3	3	3	21	
481	W-3	BM8	1544	309	51.5	3	5	5	33	
519	W-1	BM9	1545	263	47	3	4	4	30	
91	W-2	BM10	1546	227	45	1	5	5	25	
442	W-3	BM11	1547	215	48	1	3	3	21	

94	W-2	BM12	1548	297	51.5	3	5	5	24
672	W-2	BM13	1549	191	52.6	2	3	3	29
265	W-1	BM14	1550	193	49.5	3	3	3	26
440	W-1	BM15	1551	214	57	2	4	4	24
10	W-1	BM16	1552	126	NO	NO	NO	NO	NO
30	W-3	BM17	1553	201	47.4	3	4	4	22
662	W-1	BM18	1554	162	36.3	3	7	7	30
652	W-2	BM19	1555	211	43.5	4	3	3	25
271	W-1	BM20	1556	92	29.9	2	5	5	29
2	W-3	BM21	1557	205	45	3	3	3	27
727	W-3	BM22	1558	123	51.5	2	6	6	25
73	W-1	BM23	1559	128	36	2	4	4	22
198	W-2	BM24	1560	158	9	10	3	3	33
29	W-1	BN1	1561	297	46.5	6	3	3	24
107	W-3	BN2	1562	220	48.6	3	5	5	31
476	W-3	BN3	1563	148	38	6	3	3	25
347	W-2	BN4	1564	327	30.8	7	4	6	28
551	W-1	BN5	1565	295	48	3	4	4	27
6	W-3	BN6	1566	310	48.5	2	5	5	28
727	W-2	BN7	1567	243	54.9	4	5	5	24
726	W-1	BN8	1568	261	35.5	3	3	3	25
483	W-2	BN9	1569	249	50	4	3	3	30
450	W-2	BN10	1570	183	50	3	3	3	22
685	W-2	BN11	1571	226	46.3	4	2	2	20
495	W-3	BN12	1572	251	52.3	1	4	4	25
118	W-3	BN13	1573	275	48	3	3	3	26
121	W-1	BN14	1574	277	55	3	5	5	27
567	W-2	BN15	1575	278	45.6	4	5	5	37
486	W-1	BN16	1576	286	58	2	5	5	26
462	W-3	BN17	1577	291	47	3	4	4	24
160	W-1	BN18	1578	272	44	3	4	4	25
115	W-2	BN19	1579	293	46.1	3	3	3	20
610	W-2	BN20	1580	241	44	4	3	3	22

97	W-3	BN21	1581	199	46	4	5	5	21
55	W-1	BN22	1582	187	25	1	2	2	21
592	W-3	BN23	1583	264	41	4	5	5	28
888	W-3	BN24	1584	176	48	4	4	4	23
348	W-2	BO1	1585	232	40	3	6	6	25
195	W-3	BO2	1586	181	38.5	1	5	5	27
883	W-3	BO3	1587	194	43	2	4	4	26
828	W-1	BO4	1588	101	30	0	6	6	27
501	W-1	BO5	1589	214	42	0	4	4	29
175	W-3	BO6	1590	194	43	3	3	3	23
558	W-2	BO7	1591	NO	NO	NO	NO	NO	NO
38	W-2	BO8	1592	235	45	4	4	4	24
195	W-2	BO9	1593	169	47	5	4	4	28
691	W-3	BO10	1594	257	62	4	4	4	22
481	W-2	BO11	1595	228	54.5	0	7	7	33
244	W-2	BO12	1596	161	42	3	4	4	22
855	W-1	BO13	1597	212	43	3	2	2	20
467	W-2	BO14	1598	294	43.5	4	4	4	23
567	W-1	BO15	1599	254	48	2	4	6	33
504	W-1	BO16	1600	255	47	3	3	3	23
24	W-3	BO17	1601	347	33.3	3	4	4	21
590	W-2	BO18	1602	168	16	2	5	5	23
510	W-3	BO19	1603	171	51	1	4	4	29
134	W-1	BO20	1604	284	41	4	3	3	21
593	W-3	BO21	1605	250	46.5	5	3	3	21
302	W-1	BO22	1606	208	54	0	6	7	32
185	W-1	BO23	1607	103	44	0	6	6	30
627	W-2	BO24	1608	126	46	1	3	3	29
471	W-2	BP1	1609	289					31
648	W-2	BP2	1610	178	46.2	3	3	3	25
416	W-1	BP3	1611	193	51	3	3	3	22
520	W-1	BP4	1612	179	51	2	5	5	23
228	W-3	BP5	1613	145	45.5	2	4	4	25

170	W-2	BP6	1614	213	33.7	4	3	3	22	
47	W-2	BP7	1615	311	54.1	3	3	3	24	
513	W-3	BP8	1616	285	56.3	2	3	3	23	
428	W-2	BP9	1617	271	53	4	6	6	26	
625	W-3	BP10	1618	124	28.5	3	4	4	27	
654	W-2	BP11	1619	229	63	0	8	8	33	
828	W-3	BP12	1620	331	61	3	7	7	28	
21	W-2	BP13	1621	234	51.5	2	5	5	29	
160	W-3	BP14	1622	293	48.3	3	3	3	26	
543	W-1	BP15	1623	213	52	3	4	4	32	
128	W-2	BP16	1624	214	46.5	0	5	5	35	
983	W-1	BP17	1625	297	46	4	4	4	24	
445	W-2	BP18	1626	267	55	0	7	7	29	
182	W-1	BP19	1627	248	56.5	2	4	4	26	
685	W-1	BP20	1628	260	54.2	1	3	3	26	
259	W-1	BP21	1629	122	51.2	1	5	5	28	
3	W-2	BP22	1630	236	53.4	2	5	5	29	
663	W-1	BP23	1631	276	58.5	2	4	4	23	
675	W-3	BP24	1632	262	62.5	4	5	5	24	
217	W-2	BQ1	1633	174	45	4	4	4	21	
68	W-3	BQ2	1634	268	56	3	5	5	23	
658	W-1	BQ3	1635	193	53.2	0	6	6	32	
237	W-2	BQ4	1636	146	46	1	4	4	25	
463	W-3	BQ5	1637	182	56.2	2	5	5	27	
169	W-1	BQ6	1638	196	38	4	3	3	21	
651	W-1	BQ7	1639	165	46	3	3	3	25	
722	W-1	BQ8	1640	172	67	4	2	2	27	
562	W-3	BQ9	1641	324	48.2	4	5	5	22	
4	W-3	BQ10	1642	203	50	4	3	3	26	
214	W-1	BQ11	1643	248	39	4	4	4	21	
534	W-1	BQ12	1644	256	63.5	0	7	7	29	
420	W-1	BQ13	1645	127	47.3	3	2	2	26	
179	W-1	BQ14	1646	372	36	4	2	2	24	

1028	W-2	BQ15	1647	214	32	4	4	4	26	
116	W-3	BQ16	1648	174	54	1	4	4	26	
659	W-3	BQ17	1649	216	44	0	6	6	29	
523	W-1	BQ18	1650	138	56.2	2	4	4	24	
445	W-1	BQ19	1651	157	53	2	4	4	28	
109	W-1	BQ20	1652	217	45	2	3	3	24	
489	W-3	BQ21	1653	172	46	3	3	3	21	
606	W-2	BQ22	1654	189	42	4	3	3	21	
261	W-3	BQ23	1655	193	52	2	4	4	21	
626	W-1	BQ24	1656	158	50.5	2	3	3	27	
463	W-1	BR1	1657	315	55	4	6	6	28	
168	W-2	BR2	1658	NO	NO	NO	NO	NO	NO	
434	W-1	BR3	1659	257	59	2	6	6	28	
65	W-3	BR4	1660	176	48	3	5	5	25	
579	W-2	BR5	1661	251	42	3	6	6	20	
358	W-2	BR6	1662	198	46	4	3	3	22	
425	W-3	BR7	1663	281	49.5	5	4	4	25	
185	W-2	BR8	1664	43	33.5	4	8	8	27	
7	W-2	BR9	1665	45	43	1	1	1	27	
441	W-1	BR10	1666	208					27	
203	W-3	BR11	1667	223	46.2	3	5	5	23	
187	W-1	BR12	1668	206	48	3	7	7	26	
175	W-2	BR13	1669	256	44.4	2	6	6	24	
78	W-2	BR14	1670	147	48	2	3	3	32	
535	W-2	BR15	1671	204	68	1	3	4	38	
164	W-3	BR16	1672	170	48.2	3	3	3	25	
80	W-3	BR17	1673	184	51	0	5	5	29	
662	W-3	BR18	1674	241					33	
1021	W-2	BR19	1675	248	45	2	8	8	27	
18	W-3	BR20	1676	232	52	5	5	5	26	
239	W-2	BR21	1677	141	37	3	3	3	22	
720	W-1	BR22	1678	314	40	5	6	6	22	
78	W-1	BR23	1679	149	40.2	3	4	4	27	

726	W-2	BR24	1680	129	34.2	1	4	4	26	
504	W-2	BS1	1681	293	49	4	3	3	25	
453	W-1	BS2	1682	202	29.5	2	5	5	31	
447	W-2	BS3	1683	252	48	5	4	4	24	
145	W-3	BS4	1684	271	57.8	4	6	6	28	
233	W-1	BS5	1685	246	49	3	3	3	21	
220	W-1	BS6	1686	177	40	1	4	4	27	
169	W-3	BS7	1687	291	46	4	4	4	24	
553	W-2	BS8	1688	298	53	4	4	4	27	
265	W-3	BS9	1689	214	43.4	2	3	3	22	
435	W-3	BS10	1690	169	48.1	3	4	4	27	
204	W-3	BS11	1691	213	43	2	5	5	27	
1033	W-3	BS12	1692	274	51	5	4	4	23	
332	W-2	BS13	1693	168	47	2	3	3	27	
623	W-1	BS14	1694	238	43.4	3	3	3	23	
462	W-1	BS15	1695	372	50.5	4	3	3	25	
707	W-1	BS16	1696	232	52	0	7	7	30	
116	W-1	BS17	1697	288	56.1	2	4	4	27	
252	W-2	BS18	1698	224	57	3	3	3	25	
580	W-2	BS19	1699	283	57	5	4	4	24	
495	W-2	BS20	1700	213	54.5	3	4	4	25	
436	W-1	BS21	1701	260	54.3	4	5	5	26	
25	W-1	BS22	1702	194	59	0	4	4	27	
883	W-1	BS23	1703	214	55.8	2	4	4	23	
126	W-2	BS24	1704	186	51	1	5	5	28	
533	W-1	BT1	1705	187	46.5	5	2	2	26	
143	W-1	BT2	1706	236	44.6	0	8	8	33	
80	W-2	BT3	1707	234	50	2	6	6	29	
855	W-3	BT4	1708	244	41	3	4	4	21	
348	W-1	BT5	1709	142	39	1	6	6	28	
547	W-3	BT6	1710	229	52.5	2	3	3	24	
485	W-2	BT7	1711	213	26.4	3	3	3	26	
697	W-3	BT8	1712	307	46.3	4	7	7	30	

75	W-3	BT9	1713	308	46.2	2	6	6	27
640	W-3	BT10	1714	168	47.5	2	3	3	23
214	W-3	BT11	1715	273	29	4	4	4	22
41	W-3	BT12	1716	251	51	4	2	2	23
85	W-2	BT13	1717	51	57	0	4	8	42
3	W-1	BT14	1718	275	50.3	1	5	5	29
187	W-3	BT15	1719	267	45.2	4	6	6	25
647	W-3	BT16	1720	203	40	3	3	3	21
467	W-3	BT17	1721	165	46	3	4	4	25
100	W-1	BT18	1722	194	53	5	2	2	26
686	W-2	BT19	1723	215	39.8	4	3	3	24
25	W-3	BT20	1724	244	58	0	5	5	26
96	W-2	BT21	1725	138	48.8	5	3	3	26
712	W-2	BT22	1726	197	53.8	2	3	3	29
115	W-3	BT23	1727	197	42.5	4	3	3	21
460	W-3	BT24	1728	99	47	2	3	3	28
564	W-1	BU1	1729	157	50	0	3	7	29
129	W-3	BU2	1730	187	51	3	3	3	24
233	W-3	BU3	1731	130	43.5	1	3	3	24
606	W-3	BU4	1732	138	39	3	4	4	24
363	W-2	BU5	1733	105	40.5	1	4	4	27
496	W-2	BU6	1734	112	42	1	8	8	29
469	W-2	BU7	1735	262	23	3	7	7	29
411	W-2	BU8	1736	150	48.5	0	8	8	31
453	W-2	BU9	1737	199	49	0	5	5	29
524	W-3	BU10	1738	252	49.1	0	6	6	32
408	W-2	BU11	1739	191	53	1	5	5	27
506	W-2	BU12	1740	227	56	0	4	4	26
480	W-1	BU13	1741	264	46.3	4	3	3	21
854	W-3	BU14	1742	243	51.5	3	3	3	21
332	W-3	BU15	1743	221	50.1	2	2	2	26
125	W-3	BU16	1744	171	53	1	4	4	29
598	W-3	BU17	1745	143	48.8	0	4	4	30

78	W-3	BU18	1746	138	49	1	5	5	30
480	W-3	BU19	1747	215	43	4	3	3	21
434	W-3	BU20	1748	175	53.5	2	3	3	24
572	W-1	BU21	1749	228	56.2	1	5	5	29
246	W-2	BU22	1750	70	45	0	5	5	28
688	W-2	BU23	1751	201	35	2	4	4	21
636	W-1	BU24	1752	205	24	2	3	3	25
214	W-2	BV1	1753	113	28	3	4	4	21
703	W-1	BV2	1754	215	42	5	5	5	25
12	W-2	BV3	1755	225	49.5	3	3	3	25
494	W-2	BV4	1756	187		1	5	5	33
837	W-1	BV5	1757	180	45	2	5	5	25
480	W-2	BV6	1758	286	38	4	3	3	21
301	W-2	BV7	1759	117	46.2	2	2	2	27
721	W-3	BV8	1760	298	48.7	3	4	4	27
197	W-2	BV9	1761	219	23.5	1	4	4	28
77	W-2	BV10	1762	160	48	2	4	4	26
551	W-3	BV11	1763	286	41	1	5	5	29
103	W-2	BV12	1764	166	37.4	0	4	4	27
203	W-2	BV13	1765	281	51	2	5	5	22
983	W-3	BV14	1766	243	41.3	3	3	3	24
228	W-2	BV15	1767	124	47	0	3	3	25
183	W-1	BV16	1768	175	43.4	0	5	5	33
341	W-1	BV17	1769	198	35.5	0	4	7	37
736	W-2	BV18	1770	175	38	0	5	5	28
295	W-1	BV19	1771	207	43	3	3	3	26
1039	W-2	BV20	1772	234	54	5	5	5	24
158	W-1	BV21	1773	181	42	3	4	4	26
482	W-1	BV22	1774	197	50.5	4	7	7	29
860	W-1	BV23	1775	231	45	2	3	3	25
112	W-1	BV24	1776	203	34	4	2	2	31
94	W-1	BW1	1777	278	49	4	3	3	24
469	W-3	BW2	1778	203	24	2	4	4	29

736	W-3	BW3	1779	125	40	1	5	8	34	
653	W-2	BW4	1780	153	Top broken		1	2	2	27
57	W-1	BW5	1781	209	42	5	5	5	24	
257	W-3	BW6	1782	67	33.2	2	3	3	26	
26	W-3	BW7	1783	223	53	4	4	4	26	
565	W-3	BW8	1784	261	46	3	4	4	24	
447	W-1	BW9	1785	300	50	4	6	6	27	
506	W-1	BW10	1786	190	48	1	4	4	29	
242	W-1	BW11	1787	123	46	1	4	4	27	
188	W-2	BW12	1788	218	43	3	4	4	22	
494	W-1	BW13	1789	95	34	2	7	7	35	
224	W-2	BW14	1790	167	45	2	4	4	25	
662	W-2	BW15	1791	236	38.4	7	10	10	32	
111	W-2	BW16	1792	242	42.5	3	5	5	25	
446	W-2	BW17	1793	207	44.6	0	8	8	31	
627	W-3	BW18	1794	235	54	2	5	5	27	
441	W-2	BW19	1795	152	41	3	2	2	27	
720	W-2	BW20	1796	198	38	3	3	3	22	
107	W-2	BW21	1797	246	54	0	6	6	30	
566	W-2	BW22	1798	276	43	3	3	3	22	
642	W-3	BW23	1799	27	24.5	3	6	6	26	
835	W-3	BW24	1800	182	46.5	2	4	4	20	
58	W-2	BX1	1801	306	42.5	5	3	3	25	
159	W-3	BX2	1802	290	47	3	2	2	21	
131	W-2	BX3	1803	276	50.4	3	4	4	32	
352	W-3	BX4	1804	27	NO	NO	NO	NO	NO	
162	W-3	BX5	1805	124	45.3	0	6	6	28	
672	W-3	BX6	1806	160	49.5	2	5	5	26	
53	W-2	BX7	1807	298	47.4	2	5	5	23	
21	W-3	BX8	1808	NO	NO	NO	NO	NO	NO	
137	W-2	BX9	1809	371	56.5	2	6	6	31	
520	W-2	BX10	1810	235	51	2	5	5	23	
242	W-2	BX11	1811	185	54.5	1	3	3	26	

191	W-2	BX12	1812	146	37	2	3	3	22
687	W-3	BX13	1813	151	23.5	3	3	3	22
95	W-1	BX14	1814	45	27	3	7	7	30
477	W-1	BX15	1815	271	60	3	5	5	26
89	W-1	BX16	1816	211	42.3	1	3	3	22
617	W-3	BX17	1817	212	64.5	0	7	7	31
608	W-1	BX18	1818	199	54	2	5	5	29
199	W-2	BX19	1819	228	44.5	3	4	4	24
336	W-1	BX20	1820	191	30.3	2	3	3	21
528	W-1	BX21	1821	364	58.1	4	4	4	23
557	W-2	BX22	1822	232	46	4	4	4	22
59	W-1	BX23	1823	247	54	3	2	2	24
65	W-1	BX24	1824	198	51.5	3	3	3	25
636	W-3	BY1	1825	96	40	1	3	3	26
620	W-1	BY2	1826	106	49.8	4	3	3	26
179	W-3	BY3	1827	115	28	4	3	3	34
719	W-3	BY4	1828	217	25	4	3	3	25
432	W-2	BY5	1829	289	31	7	3	3	25
130	W-2	BY6	1830	204	59.2	4	4	4	24
34	W-2	BY7	1831	234	46.1	1	6	6	30
341	W-3	BY8	1832	143	50	4	4	4	30
254	W-1	BY9	1833	110	39	4	2	2	27
219	W-1	BY10	1834	58	53.2	2	2	2	27
448	W-2	BY11	1835	261	45.8	7	4	4	27
945	W-2	BY12	1836	139	44	5	4	4	25
524	W-1	BY13	1837	244	49	0	7	7	30
145	W-1	BY14	1838	156	55.2	5	8	8	29
46	W-3	BY15	1839	257	45	3	3	3	20
275	W-3	BY16	1840	153	43.5	3	3	4	25
338	W-1	BY17	1841	237	47	5	3	3	26
661	W-3	BY18	1842	229	52	3	8	8	26
203	W-1	BY19	1843	165	43	0	5	5	23
457	W-3	BY20	1844	281	49.6	2	7	7	29

501	W-3	BY21	1845	132	53	1	4	4	29
535	W-1	BY22	1846	0	NO	NO	NO	NO	NO
216	W-1	BY23	1847	79	24	1	5	5	26
464	W-1	BY24	1848	286	49	5	3	3	25
485	W-3	BZ1	1849	243	32	3	3	3	28
49	W-2	BZ2	1850	175	55	0	7	7	31
269	W-3	BZ3	1851	295	49	2	4	4	28
439	W-1	BZ4	1852	249	59.2	0	8	8	31
238	W-2	BZ5	1853	193	52.9	4	3	3	24
626	W-3	BZ6	1854	260	49	3	4	4	26
419	W-3	BZ7	1855	276	47	3	3	3	28
87	W-1	BZ8	1856	184	62.1	2	2	2	27
141	W-3	BZ9	1857	247	57	4	4	4	29
225	W-1	BZ10	1858	267	45	4	3	3	22
408	W-1	BZ11	1859	302	59	1	6	6	30
176	W-3	BZ12	1860	90	34.1	1	4	4	24
262	W-2	BZ13	1861	117	60	2	3	3	26
270	W-3	BZ14	1862	163	45.6	3	4	4	26
465	W-1	BZ15	1863	258	51.5	2	4	4	23
543	W-3	BZ16	1864	245	58	0	7	7	32
831	W-2	BZ17	1865	254	53	1	3	3	27
712	W-1	BZ18	1866	186	50	0	3	6	31
983	W-2	BZ19	1867	382	61.3	5	4	4	24
707	W-2	BZ20	1868	259	53	0	6	6	33
295	W-2	BZ21	1869	213	47.2	2	5	5	27
661	W-2	BZ22	1870	239	51	0	6	6	30
617	W-2	BZ23	1871	196	67	1	5	5	31
194	W-1	BZ24	1872	195	49	4	3	3	27
732	W-1	CA1	1873	239	36	4	3	3	26
48	W-3	CA2	1874	306	44.5	3	4	4	24
12	W-1	CA3	1875	274	49.5	4	3	3	26
467	W-1	CA4	1876	351	39	5	3	3	22
235	W-2	CA5	1877	165	47.5	3	3	3	27

529	W-3	CA6	1878	200	40.2	3	4	4	27
28	W-1	CA7	1879	208	25.5	3	3	3	21
266	W-3	CA8	1880	101	47	3	4	4	28
198	W-3	CA9	1881	252	51	0	7	7	32
738	W-1	CA10	1882	215	53	1	4	4	27
688	W-3	CA11	1883	225	55.3	3	5	5	25
332	W-1	CA12	1884	201	52.5	3	3	3	26
459	W-1	CA13	1885	237	55.5	5	3	3	28
609	W-3	CA14	1886	232	58.7	3	3	3	27
722	W-3	CA15	1887	252	60	1	5	5	26
610	W-1	CA16	1888	314	47.5	5	3	3	24
27	W-2	CA17	1889	251	53.3	3	4	4	27
428	W-3	CA18	1890	296	42.1	4	5	5	24
474	W-1	CA19	1891	281	54.5	5	2	2	23
169	W-2	CA20	1892	293	43.4	5	5	5	22
709	W-2	CA21	1893	147	40	3	4	4	26
75	W-1	CA22	1894	244	47	2	5	5	28
409	W-1	CA23	1895	215	39.5	0	7	7	31
413	W-1	CA24	1896	186	27	4	4	4	25
178	W-1	CB1	1897	178	49	3	3	3	26
190	W-3	CB2	1898	112	37	3	4	4	32
111	W-1	CB3	1899	203	44.5	6	4	4	25
518	W-3	CB4	1900	188	49	0	6	6	28
121	W-2	CB5	1901	194	49.5	3	5	5	28
482	W-3	CB6	1902	227	48.5	1	8	8	33
849	W-1	CB7	1903	266	40	4	3	3	22
9	W-2	CB8	1904	259	58	3	3	3	24
36	W-3	CB9	1905	168	55.4	0	5	5	27
528	W-2	CB10	1906	291	51	2	3	3	21
286	W-3	CB11	1907	215	54	2	3	3	22
573	W-1	CB12	1908	216	51	2	3	3	27
536	W-3	CB13	1909	281	54	3	3	3	27
611	W-1	CB14	1910	293	48.5	2	5	5	27

46	W-2	CB15	1911	210	45	2	4	4	20
128	W-3	CB16	1912	198	52.1	0	3	4	35
554	W-1	CB17	1913	181	40.4	1	5	5	26
230	W-1	CB18	1914	167	51.3	1	4	4	28
38	W-1	CB19	1915	178	49.5	3	3	3	23
636	W-2	CB20	1916	159	49	2	4	4	23
625	W-2	CB21	1917	117	31.8	2	3	3	26
54	W-1	CB22	1918	142	51	0	5	5	28
194	W-3	CB23	1919	164	49	4	4	4	24
106	W-3	CB24	1920	171	54	3	3	3	28
104	W-2	CC1	1921	262	42	4	2	2	23
223	W-2	CC2	1922	147	46	3	4	4	29
200	W-1	CC3	1923	213	49	1	6	6	29
474	W-3	CC4	1924	214	54	4	4	4	25
457	W-2	CC5	1925	206	51.2	2	3	3	26
461	W-1	CC6	1926	226	51.5	1	4	4	25
473	W-2	CC7	1927	96	28	1	3	3	21
600	W-2	CC8	1928	219	53	3	2	2	25
365	W-2	CC9	1929	221	46.5	2	4	4	28
247	W-3	CC10	1930	196	45.8	3	3	3	26
354	W-3	CC11	1931	159	40.1	1	6	6	31
564	W-3	CC12	1932	NO	NO	NO	NO	NO	NO
130	W-3	CC13	1933	195	58	3	3	3	24
469	W-1	CC14	1934	264	23	0	7	7	32
806	W-2	CC15	1935	243	49	0	4	4	23
439	W-3	CC16	1936	198	55.6	0	5	6	32
159	W-2	CC17	1937	225	47	2	4	4	22
485	W-1	CC18	1938	238	32	3	3	3	27
422	W-2	CC19	1939	286	50.5	3	4	4	24
569	W-1	CC20	1940	175	47.3	0	6	8	34
652	W-3	CC21	1941	143	47.5	1	2	2	27
56	W-3	CC22	1942	249	54.2	3	5	5	26
528	W-3	CC23	1943	333	53	3	4	4	23

823	W-1	CC24	1944	266	47.5	2	3	3	23	
500	W-1	CD1	1945	162	51.2	4	5	5	24	
2	W-1	CD2	1946	289	57	2	4	4	28	
536	W-2	CD3	1947	265	47	4	4	4	31	
191	W-3	CD4	1948	256	31.4	2	4	4	21	
581	W-2	CD5	1949	226	46.1	0	5	5	29	
451	W-2	CD6	1950	NO	NO	NO	NO	NO	25	
84	W-1	CD7	1951	81	30	2	4	4	24	
200	W-3	CD8	1952	172	56	0	6	6	29	
436	W-3	CD9	1953	247	56.3	3	7	7	30	
133	W-1	CD10	1954	216	27	0	5	5	29	
403	W-1	CD11	1955	223	49	3	3	3	26	
352	W-1	CD12	1956	153	46.5	2	4	4	30	
450	W-3	CD13	1957	236	49	3	3	3	24	
424	W-3	CD14	1958	286	55.5	3	3	3	28	
352	W-2	CD15	1959	177	51.5	3	2	2	27	
541	W-3	CD16	1960	254	43	3	3	3	23	
414	W-3	CD17	1961	141	23.5	0	6	6	34	
449	W-3	CD18	1962	297	59.8	1	4	4	33	
473	W-1	CD19	1963	411	47.5	7	3	3	23	
1021	W-1	CD20	1964	333	52	4	5	5	26	
216	W-3	CD21	1965	161	32	1	5	5	25	
43	W-2	CD22	1966	140	48	0	4	4	29	
126	W-1	CD23	1967	240	49.2	0	6	6	27	
823	W-3	CD24	1968	236	51.6	3	2	2	26	
267	W-2	CE1	1969	185	31.2	4	4	4	28	
95	W-3	CE2	1970	144	40	0	5	5	30	
558	W-3	CE3	1971	177	42.1	2	4	4	22	
625	W-1	CE4	1972	180	24.5	3	3	3	27	
130	W-1	CE5	1973	152	49.2	3	4	4	22	
554	W-3	CE6	1974	189	49	3	3	3	23	
626	W-2	CE7	1975	193	51	5	3	3	26	
675	W-1	CE8	1976	186	61.4	2	5	5	26	

147	W-3	CE9	1977	162	47	2	5	5	26
641	W-3	CE10	1978	87	38.7	2	5	5	30
460	W-1	CE11	1979	206	53.5	0	5	5	28
180	W-3	CE12	1980	199	47	0	7	7	30
563	W-1	CE13	1981	198	48	3	5	5	26
22	W-2	CE14	1982	211	51	4	3	3	23
98	W-2	CE15	1983	204	47.5	5	3	3	27
241	W-3	CE16	1984	149	51	0	5	5	28
411	W-1	CE17	1985	163	49	0	7	7	30
141	W-2	CE18	1986	223	43.7	4	5	5	24
156	W-3	CE19	1987	92	44.1	2	3	3	24
726	W-3	CE20	1988	117	33.6	3	3	3	25
491	W-3	CE21	1989	131	48.6	1	4	4	28
278	W-3	CE22	1990	69	46	3	3	3	26
511	W-1	CE23	1991	168	44.2	2	5	5	25
639	W-2	CE24	1992	101	43.4	1	3	3	27
518	W-2	CF1	1993	127	51.2	2	4	4	29
267	W-3	CF2	1994	248	47.5	2	6	6	25
182	W-2	CF3	1995	184	47.5	4	4	4	23
477	W-3	CF4	1996	294	67	1	3	3	28
416	W-2	CF5	1997	179	49	2	4	4	20
87	W-3	CF6	1998	177	45	2	3	3	23
259	W-2	CF7	1999	264	48	3	4	4	27
562	W-2	CF8	2000	329	43	3	7	5	22
17	W-2	CF9	2001	352	37	5	4	4	25
664	W-2	CF10	2002	183	56.5	0	6	6	27
849	W-3	CF11	2003	169	50	3	4	4	24
557	W-3	CF12	2004	237	45.5	6	4	3	23
57	W-2	CF13	2005	245	48.5	5	3	3	23
856	W-1	CF14	2006	187	47	3	2	2	24
56	W-1	CF15	2007	NO	NO	NO	NO	NO	NO
460	W-2	CF16	2008	213	67	2	3	3	29
338	W-3	CF17	2009	208	47	3	3	3	26

92	W-3	CF18	2010	175	47	3	4	4	26	
272	W-3	CF19	2011	155	47	0	5	5	27	
347	W-1	CF20	2012	251	41.5	5	3	3	22	
512	W-1	CF21	2013	217	41.3	3	2	2	25	
512	W-3	CF22	2014	235	43.9	4	4	4	23	
4	W-1	CF23	2015	211	49	2	4	4	24	
22	W-1	CF24	2016	171	37.9	3	3	3	23	
210	W-3	CG1	2017	184	25	3	3	3	20	
479	W-1	CG2	2018	258	58.4	4	3	3	21	
166	W-1	CG3	2019	187	53	1	3	3	26	
358	W-3	CG4	2020	205	44	4	3	3	22	
301	W-1	CG5	2021	185	48	3	3	3	29	
642	W-2	CG6	2022	189	26	2	4	4	26	
565	W-2	CG7	2023	216	46.5	3	4	4	23	
180	W-1	CG8	2024	201	51.9	2	5	5	29	
94	W-3	CG9	2025	274	55	4	3	3	24	
447	W-3	CG10	2026	254	47	5	6	6	24	
494	W-3	CG11	2027	195	45	0	6	6	34	
239	W-3	CG12	2028	95	31	2	3	3	22	
131	W-3	CG13	2029	248	43.5	2	6	6	29	
732	W-2	CG14	2030	228	43.8	3	3	3	27	
658	W-3	CG15	2031	290	55.2	0	8	8	32	
4	W-2	CG16	2032	218	48	3	5	5	27	
237	W-1	CG17	2033	87	45	3	3	3	23	
567	W-3	CG18	2034	239	49	2	4	4	31	
580	W-3	CG19	2035	168	51.5	4	3	3	24	
114	W-2	CG20	2036	236	56	2	4	4	27	
91	W-3	CG21	2037	254	47	2	3	3	26	
265	W-2	CG22	2038	189	46	3	4	4	31	
217	W-3	CG23	2039	141	41	4	3	3	23	
129	W-2	CG24	2040	173	49	3	2	2	29	
48	W-1	CH1	2041	157	52	4	3	3	26	
429	W-2	CH2	2042	222	49.2	2	4	4	25	

553	W-1	CH3	2043	376	37.2	4	4	5	34	
331	W-1	CH4	2044	186	53.4	4	4	4	27	
686	W-3	CH5	2045	118	51	3	2	2	28	
269	W-1	CH6	2046	0	33	3	2	2	30	
666	W-1	CH7	2047	482	69	2	5	5	27	
519	W-2	CH8	2048	220	55	2	4	4	28	
464	W-2	CH9	2049	294	50	3	3	3	25	
486	W-3	CH10	2050	246	57.5	2	4	4	25	
248	W-3	CH11	2051	193	42.4	4	3	3	28	
566	W-1	CH12	2052	88	42	0	2	2	24	
672	W-1	CH13	2053	243	62.1	3	3	3	29	
159	W-1	CH14	2054	315	46.3	4	4	4	19	
363	W-1	CH15	2055	140	51	0	4	4	27	
355	W-2	CH16	2056	271	51	5	4	4	27	
615	W-2	CH17	2057	206	43	1	3	3	21	
442	W-2	CH18	2058	155	46.2	3	3	3	30	
65	W-2	CH19	2059	260	46	3	3	3	24	
419	W-1	CH20	2060	247	46.5	5	3	3	27	
126	W-3	CH21	2061	249	56	0	5	5	27	
1032	W-2	CH22	2062	213	27.1	1	6	7	25	
1	W-3	CH23	2063	378	48	6	2	2	20	
52	W-2	CH24	2064	236					22	
409	W-2	CI1	2065	247	41.7	0	8	8	31	
215	W-3	CI2	2066	249	30.5	4	4	4	22	
593	W-1	CI3	2067	203	51	3	3	3	26	
269	W-2	CI4	2068	287	57	0	2	2	31	
472	W-1	CI5	2069	289	29	3	4	4	21	
664	W-1	CI6	2070	176	56	0	4	4	28	
166	W-3	CI7	2071	229	51	2	3	3	24	
80	W-1	CI8	2072	228	53	2	4	4	28	
569	W-3	CI9	2073	250	54.5	0	7	7	33	
738	W-2	CI10	2074	223	49	0	6	6	34	
186	W-1	CI11	2075	243	42	4	3	3	25	

29	W-2	CI12	2076	247	55	3	2	2	26
541	W-1	CI13	2077	263	36	2	3	3	24
455	W-1	CI14	2078	206					30
125	W-1	CI15	2079	218	52	0	7	7	30
652	W-1	CI16	2080	224	47	1	3	3	27
239	W-1	CI17	2081	118	35	1	3	3	21
118	W-1	CI18	2082	241	53.6	3	3	3	25
408	W-3	CI19	2083	295	61	2	4	4	30
281	W-2	CI20	2084	217	49	4	6	6	30
243	W-2	CI21	2085	200	54	4	5	5	26
461	W-2	CI22	2086	279	56	3	3	3	27
691	W-1	CI23	2087	259	37	1	2	2	22
29	W-3	CI24	2088	291	54.1	4	4	4	24
496	W-3	CJ1	2089	285	46	5	6	6	28
437	W-1	CJ2	2090	217	49	5	4	4	27
883	W-2	CJ3	2091	168	47.5	2	3	3	23
27	W-1	CJ4	2092	162	51	4	4	4	27
73	W-3	CJ5	2093	236	51	3	4	4	24
511	W-3	CJ6	2094	261	51.5	3	3	3	26
508	W-1	CJ7	2095	205	52				29
68	W-1	CJ8	2096	257	56.7	3	4	4	24
95	W-2	CJ9	2097	106	47.6	3	3	3	30
483	W-3	CJ10	2098	264	41				28
719	W-2	CJ11	2099	127	25	4	4	4	26
564	W-2	CJ12	2100	198	53.4	2	4	4	29
112	W-3	CJ13	2101	234	32	5	0	0	29
358	W-1	CJ14	2102	173	47.2	4	2	2	27
854	W-1	CJ15	2103	335	54	5	2	2	23
435	W-2	CJ16	2104	213	47.5	3	3	3	25
112	W-2	CJ17	2105	219	49	1	5	5	30
436	W-2	CJ18	2106	275	49	2	4	4	27
471	W-3	CJ19	2107	249					31
503	W-3	CJ20	2108	162					28

415	W-2	CJ21	2109	304	34	4	3	3	23
410	W-3	CJ22	2110	223	45	4	3	3	24
579	W-3	CJ23	2111	209	54	2	3	3	25
30	W-1	CJ24	2112	247	46.2	5	3	3	22
115	W-1	CK1	2113	282	45	3	3	3	20
609	W-2	CK2	2114	415	64	2	5	5	24
608	W-2	CK3	2115	187	NO	NO	NO	NO	NO
575	W-3	CK4	2116	193	48	4	4	4	23
666	W-2	CK5	2117	324	61	2	4	4	26
53	W-3	CK6	2118	179	42	4	5	5	22
465	W-2	CK7	2119	226	43.1	2	2	2	21
97	W-2	CK8	2120	199	48	4	4	4	23
133	W-2	CK9	2121	206	26	2	5	5	29
640	W-1	CK10	2122	183	36.5	1	3	3	23
560	W-2	CK11	2123	263	35.5	4	3	3	21
47	W-3	CK12	2124	111	42	1	3	3	23
267	W-1	CK13	2125	25	36	3	4	4	28
100	W-3	CK14	2126	77	45	3	4	4	27
38	W-3	CK15	2127	261	48	3	3	3	24
856	W-3	CK16	2128	48	31	1	4	4	25
445	W-3	CK17	2129	287	54.5	3	4	4	27
177	W-3	CK18	2130	160					24
109	W-2	CK19	2131	199	54	2	4	4	25
471	W-1	CK20	2132	274	48.1	6	6	6	28
290	W-3	CK21	2133	212	53	5	3	3	24
562	W-1	CK22	2134	284	43	3	5	5	22
523	W-3	CK23	2135	260	52	4	3	3	25
53	W-1	CK24	2136	265	45				24
247	W-1	CL1	2137	145	50	4	4	4	23
215	W-1	CL2	2138	178	28	3	3	3	22
472	W-2	CL3	2139	279	28	4	3	3	22
481	W-1	CL4	2140	257	54	0	4	4	33
273	W-2	CL5	2141	126	43	3	2	2	23

615	W-3	CL6	2142	215	43.6	4	3	3	21	
156	W-1	CL7	2143	198	46	3	3	3	23	
589	W-2	CL8	2144	152	Top broken		4	3	3	25
462	W-2	CL9	2145	174	42	2	3	3	24	
143	W-2	CL10	2146	258	64	0	9	12	48	
46	W-1	CL11	2147	212	46	2	3	3	20	
489	W-1	CL12	2148	181	52	3	3	3	24	
190	W-2	CL13	2149	101	36	3	2	2	26	
411	W-3	CL14	2150	257	55.5	2	7	7	30	
129	W-1	CL15	2151	336	60.5	3	5	5	29	
252	W-1	CL16	2152	161	23.2	1	3	3	22	
510	W-2	CL17	2153	203	49.5	4	3	3	32	
492	W-1	CL18	2154	154	51	2	4	4	25	
111	W-3	CL19	2155	258	49	3	4	4	26	
434	W-2	CL20	2156	244	56	3	2	2	25	
55	W-3	CL21	2157	234	26	2	3	3	23	
151	W-1	CL22	2158	426	39	7	4	4	33	
452	W-3	CL23	2159	209	51	3	3	3	29	
525	W-1	CL24	2160	164	46	0	6	6	31	
264	W-1	CM1	2161	265	20	1	5	5	33	
300	W-3	CM2	2162	112	31	3	3	3	23	
241	W-2	CM3	2163	163	47.2	3	3	3	27	
17	W-3	CM4	2164	284	37	3	4	4	27	
52	W-3	CM5	2165	189	42	3	4	4	23	
98	W-1	CM6	2166	90	28	3	3	3	26	
833	W-3	CM7	2167	218	27	3	2	2	26	
525	W-2	CM8	2168	273	46.2	2	5	5	32	
477	W-2	CM9	2169	331	69	3	5	5	28	
835	W-1	CM10	2170	287	55.5	3	4	4	22	
151	W-2	CM11	2171	382	38	4	3	3	22	
641	W-1	CM12	2172	261	45	3	5	5	29	
687	W-2	CM13	2173	210	26	3	3	3	22	
620	W-2	CM14	2174	178	52.8	3	5	5	26	

230	W-2	CM15	2175	189	40	3	1	4	35
659	W-2	CM16	2176	246	51	2	5	5	29
26	W-1	CM17	2177	225	63	1	4	4	27
247	W-2	CM18	2178	142	33	4	3	3	25
607	W-3	CM19	2179	102	24	3	4	4	25
675	W-2	CM20	2180	275	58.4	2	4	4	30
57	W-3	CM21	2181	212	45	5	4	4	26
491	W-2	CM22	2182	179	49.7	0	5	5	30
238	W-3	CM23	2183	195	50.8	3	3	3	24
97	W-1	CM24	2184	159	44.5	3	3	3	23
36	W-2	CN1	2185	164	62	1	5	5	27
444	W-3	CN2	2186	211	46	3	2	2	23
489	W-2	CN3	2187	167	49.3	2	2	2	21
279	W-2	CN4	2188	178	20	3	3	3	24
606	W-1	CN5	2189	249	42.1	3	5	5	25
273	W-3	CN6	2190	114	43.6	2	4	4	26
424	W-1	CN7	2191	294	47.5	4	4	4	28
453	W-3	CN8	2192	148	49.5	1	5	5	29
266	W-2	CN9	2193	141	49	1	4	4	27
58	W-1	CN10	2194	156	40	3	3	3	26
551	W-2	CN11	2195	274	48	3	4	4	27
647	W-1	CN12	2196	279	42	3	2	2	23
653	W-3	CN13	2197	151	50.6	2	4	4	28
3	W-3	CN14	2198	234	54	5	5	5	28
498	W-2	CN15	2199	infertile	46	3	4	4	26
41	W-2	CN16	2200	170	49.2	4	3	3	23
558	W-1	CN17	2201	259	43	2	3	3	25
691	W-2	CN18	2202	245	59.5	0	7	8	30
48	W-2	CN19	2203	210	54	4	3	3	24
533	W-2	CN20	2204	235	45	4	2	2	19
607	W-2	CN21	2205	313	21	4	3	3	27
355	W-1	CN22	2206	238	48.5	5	5	5	26
187	W-2	CN23	2207	227	50.5	3	5	5	26

98	W-3	CN24	2208	211	41.5	3	3	3	26	
254	W-2	CO1	2209	81	34	4	3	3	24	
602	W-2	CO2	2210	174	47	2	3	3	24	
85	W-1	CO3	2211	4	16	4	3	3	37	
505	W-1	CO4	2212	205	44.2	3	3	3	25	
143	W-3	CO5	2213	249	51	2	7	7	30	
413	W-2	CO6	2214	139	26.5	4	3	3	24	
579	W-1	CO7	2215	208	Top broken		3	4	4	21
569	W-2	CO8	2216	211	NO	NO	NO	NO	NO	
84	W-3	CO9	2217	213	32.1	2	4	4	22	
241	W-1	CO10	2218	176	41	3	4	4	29	
863	W-1	CO11	2219	291	46	4	3	3	22	
235	W-1	CO12	2220	169	50	3	4	4	26	
419	W-2	CO13	2221	245	46.5	4	4	4	26	
446	W-1	CO14	2222	213	47.8	0	5	5	31	
222	W-2	CO15	2223	229	48	2	2	2	24	
831	W-1	CO16	2224	171	55	2	2	2	25	
223	W-1	CO17	2225	119	40.5	3	5	5	26	
278	W-1	CO18	2226	235	32	3	4	4	29	
654	W-1	CO19	2227	238	39	1	4	4	36	
145	W-2	CO20	2228	314	62	5	4	4	28	
338	W-2	CO21	2229	254	48.7	4	2	2	26	
295	W-3	CO22	2230	206	27	4	2	2	25	
52	W-1	CO23	2231	167	48.3	4	3	3	23	
505	W-3	CO24	2232	102	32.3	2	3	3	22	
170	W-1	CP1	2233	176	32	5	4	4	23	
1032	W-3	CP2	2234	372	22	5	4	4	29	
271	W-2	CP3	2235	119	32	5	4	4	27	
6	W-1	CP4	2236	NO	NO	NO	NO	NO	NO	
461	W-3	CP5	2237	18	17	0	1	3	30	
272	W-1	CP6	2238	46	53.1	0	6	6	25	
450	W-1	CP7	2239	81	36	3	1	1	33	
603	W-1	CP8	2240	249	44	3	1	1	29	

96	W-3	CP9	2241	276	50.2	5	3	3	26
500	W-2	CP10	2242	142	53.4	2	4	4	28
427	W-1	CP11	2243	157	53	4	3	3	22
479	W-2	CP12	2244	268	54	5	3	4	31
210	W-2	CP13	2245	243	28	3	4	4	22
410	W-1	CP14	2246	203	40	4	3	3	20
1028	W-3	CP15	2247	189	28.2	3	3	3	22
449	W-1	CP16	2248	448	55	4	3	3	35
167	W-2	CP17	2249	38	NO	NO	NO	NO	NO
232	W-1	CP18	2250	231	51	5	4	4	27
77	W-1	CP19	2251	111	43.8	3	2	2	26
686	W-1	CP20	2252	211	54.8	4	3	3	24
7	W-1	CP21	2253	87	28.2	1	4	4	29
854	W-2	CP22	2254	229	48	3	4	4	25
258	W-1	CP23	2255	140	NO	NO	NO	NO	NO
580	W-1	CP24	2256	200	49.5	3	4	4	23
30	W-2	CQ1	2257	224	47	4	3	3	21
286	W-2	CQ2	2258	162	58.5	2	3	3	22
459	W-2	CQ3	2259	309	59	0	8	8	31
56	W-2	CQ4	2260	36	NO	NO	NO	NO	NO
642	W-1	CQ5	2261	201	28.1	3	6	6	25
266	W-1	CQ6	2262	154	49	1	4	4	26
465	W-3	CQ7	2263	239	45	2	3	3	23
215	W-2	CQ8	2264	215					22
687	W-1	CQ9	2265	209	29	3	2	2	22
137	W-3	CQ10	2266	273	53	3	3	3	27
736	W-1	CQ11	2267	139	49.1	0	4	4	31
409	W-3	CQ12	2268	180	37	0	7	7	31
888	W-1	CQ13	2269	209	57.5	2	3	3	23
134	W-2	CQ14	2270	253	46	4	2	2	22
191	W-1	CQ15	2271	329	28	3	3	3	22
1039	W-3	CQ16	2272	260	54.7	2	5	5	27
195	W-1	CQ17	2273	31	27	0	5	5	28

248	W-1	CQ18	2274	98	48.2	1	4	4	29
709	W-3	CQ19	2275	170	54	3	3	3	26
212	W-1	CQ20	2276	99	40.1	3	3	3	25
611	W-3	CQ21	2277	218	48	2	4	4	24
18	W-2	CQ22	2278	219	56.5	4	3	3	23
270	W-2	CQ23	2279	177	47	4	3	3	26
856	W-2	CQ24	2280	181	44	3	3	3	24
402	W-1	CR1	2281	206	59	5	3	3	24
495	W-1	CR2	2282	198	50.5	2	3	3	20
520	W-3	CR3	2283	227	52	1	6	6	27
116	W-2	CR4	2284	257	42	5	2	2	30
183	W-2	CR5	2285	164	40	0	3	4	32
168	W-3	CR6	2286	56	37	3	2	2	28
216	W-2	CR7	2287	101	31	3	3	3	24
42	W-2	CR8	2288	199	47	3	5	5	26
347	W-3	CR9	2289	195	47	5	3	3	24
72	W-1	CR10	2290	89	46.5	2	5	5	22
183	W-3	CR11	2291	NO	NO	NO	NO	NO	NO
243	W-1	CR12	2292	86	46.3	4	6	6	24
49	W-1	CR13	2293	143	43.2	1	5	5	27
9	W-3	CR14	2294	207	60	2	3	3	24
609	W-1	CR15	2295	258	61	3	3	3	24
166	W-2	CR16	2296	131	41	3	3	3	22
806	W-1	CR17	2297	271	50	3	3	3	25
224	W-1	CR18	2298	147	44	5	5	5	26
547	W-1	CR19	2299	236	50	1	5	5	25
12	W-3	CR20	2300	246	51.2	3	3	3	25
610	W-3	CR21	2301	314	48	6	3	3	24
248	W-2	CR22	2302	205	52	2	2	4	24
486	W-2	CR23	2303	318	59	4	5	5	25
589	W-1	CR24	2304	225	54.5	2	5	5	26
721	W-2	CS1	2305	145	49	0	5	5	29
1028	W-1	CS2	2306	195	30	3	4	4	26

560	W-1	CS3	2307	326	37.6	5	3	3	22	
177	W-1	CS4	2308	246					25	
403	W-3	CS5	2309	197	51	0	3	3	25	
26	W-2	CS6	2310	187	59.5	0	5	5	26	
508	W-2	CS7	2311	344	53	2	6	6	24	
666	W-3	CS8	2312	557	66	6	4	4	26	
186	W-2	CS9	2313	270	51	5	2	2	23	
501	W-2	CS10	2314	213	49	4	2	2	22	
837	W-3	CS11	2315	238	53.5	4	3	3	26	
204	W-2	CS12	2316	117	39.5	0	6	6	27	
42	W-3	CS13	2317	61	36	0	1	1	25	
529	W-2	CS14	2318	178	52	2	5	5	25	
543	W-2	CS15	2319	237	48	0	6	6	35	
659	W-1	CS16	2320	170	41	0	5	5	27	
547	W-2	CS17	2321	170	40.5	7	1	1	29	
440	W-3	CS18	2322	210	58	3	4	4	26	
103	W-1	CS19	2323	54	32	3	5	5	28	
492	W-3	CS20	2324	201	51.5	3	3	3	24	
249	W-2	CS21	2325	229	50.4	2	6	6	26	
92	W-2	CS22	2326	153	43	3	4	4	26	
36	W-1	CS23	2327	189	63.1	0	5	5	27	
617	W-1	CS24	2328	228	62	1	3	3	32	
607	W-1	CT1	2329	258	27	4	4	4	26	
530	W-2	CT2	2330	178	45.8	2	5	5	29	
476	W-2	CT3	2331	225	47.2	2	3	3	25	
106	W-2	CT4	2332	216	52.5	0	6	6	29	
573	W-2	CT5	2333	191	48	2	3	3	26	
100	W-2	CT6	2334	202	48.8	5	4	4	25	
530	W-3	CT7	2335	177	48	2	5	5	28	
114	W-3	CT8	2336	229	62.1	0	5	6	35	
224	W-3	CT9	2337	224	47	5	3	3	26	
76	W-2	CT10	2338	186	51	1	3	3	25	
530	W-1	CT11	2339	210	48	7	5	5	28	

536	W-1	CT12	2340	245	48.5	3	4	4	28
121	W-3	CT13	2341	252	55.3	2	5	5	27
28	W-2	CT14	2342	152	33	3	2	2	24
331	W-2	CT15	2343	237	56	4	4	4	28
403	W-2	CT16	2344	251	51.2	3	3	3	25
147	W-1	CT17	2345	NO	NO	NO	NO	NO	NO
223	W-3	CT18	2346	133	42	3	6	6	26
664	W-3	CT19	2347	226	47.5	5	4	4	27
355	W-3	CT20	2348	231	51.5	5	5	5	25
628	W-2	CT21	2349	126	35	3	4	4	25
158	W-3	CT22	2350	214	47	4	5	5	32
67	W-2	CT23	2351	139	42	1	3	3	21
833	W-2	CT24	2352	231	30.5	3	3	3	26
262	W-1	CU1	2353	22	42	3	4	4	29
363	W-3	CU2	2354	174	42.4	3	4	4	27
513	W-1	CU3	2355	206	45	3	3	3	22
125	W-2	CU4	2356	201	49.4	1	3	3	28
663	W-2	CU5	2357	284	59	2	3	3	21
21	W-1	CU6	2358	224	38.6	3	2	2	25
155	W-1	CU7	2359	273	50	3	3	3	21
591	W-3	CU8	2360	251	51.2	4	3	3	23
591	W-1	CU9	2361	237	48	5	3	3	22
512	W-2	CU10	2362	227	40	2	3	3	24
598	W-1	CU11	2363	250	51.3	1	4	4	28
200	W-2	CU12	2364	201	55.5	5	5	5	25
118	W-2	CU13	2365	192	37	3	3	3	24
164	W-2	CU14	2366	159	52.5	2	3	3	23
555	W-3	CU15	2367	252	44	3	4	4	22
182	W-3	CU16	2368	242	55.4	3	4	4	25
22	W-3	CU17	2369	356	54	3	3	3	25
592	W-1	CU18	2370	302	41.2	5	4	4	30
414	W-1	CU19	2371	111	18	3	3	5	29
828	W-2	CU20	2372	324	61	3	8	8	27

336	W-3	CU21	2373	216	39.2	2	6	6	22
54	W-3	CU22	2374	146	52	0	5	5	28
10	W-3	CU23	2375	223	53	5	1	1	31
888	W-2	CU24	2376	227	43	2	3	3	32
67	W-3	CV1	2377	119	41	3	3	3	20
402	W-2	CV2	2378	250	55	6	4	4	25
41	W-1	CV3	2379	293	54	5	2	2	22
432	W-1	CV4	2380	144	29.8	4	4	4	25
73	W-2	CV5	2381	169	48.4	5	5	5	22
6	W-2	CV6	2382	NO	NO	NO	NO	NO	NO
271	W-3	CV7	2383	103	35.1	4	2	2	26
188	W-3	CV8	2384	295	49.5	5	3	3	22
217	W-1	CV9	2385	291	46	5	4	4	23
151	W-3	CV10	2386	348	45	8	2	2	22
518	W-1	CV11	2387	194	53.5	1	5	5	33
410	W-2	CV12	2388	116	41	3	2	2	21
441	W-3	CV13	2389	197	49.6	3	5	5	25
128	W-1	CV14	2390	296	44	3	9	9	34
823	W-2	CV15	2391	271	35	4	2	2	28
863	W-3	CV16	2392	160		2	3	3	22
246	W-3	CV17	2393	96	45.2	0	6	6	29
529	W-1	CV18	2394	215	43	4	4	4	31
68	W-2	CV19	2395	227	56	3	3	3	22
439	W-2	CV20	2396	299	55	1	7	7	30
32	W-2	CV21	2397	288	30	4	4	4	26
455	W-2	CV22	2398	216	44	2	2	2	30
422	W-1	CV23	2399	239	39	6	5	5	26

Chapter 3: Primary Data

Line ID	Trt/Rep	# Tray	# Pot	Fruits	Height	Basal	Branches	Nodes	DFF
175	D-2	A1	1	104	24	1	4	4	24
1032	D-2	A2	2	134	20	1	3	3	25
2	D-3	A3	3	204	39.2	2	3	3	25
91	D-2	A4	4	133	32.5	0	4	4	25
200	D-1	A5	5	157	38	0	6	7	26
246	D-3	A6	6	7	11	0	5	7	33
508	D-2	A7	7	14	11	0	2	2	25
9	D-1	A8	8	123	46	1	3	3	25
513	D-2	A9	9	133	32	0	3	3	23
553	D-2	A10	10	144	30	0	6	6	26
625	D-2	A11	11	109	16	1	5	5	27
248	D-2	A12	12	116	34	0	4	4	26
28	D-1	A13	13	118	14	0	3	3	21
58	D-1	A14	14	113	24.3	2	3	3	24
73	D-2	A15	15	202	34	3	4	4	24
107	D-3	A16	16	138	37.7	0	5	8	31
640	D-2	A17	17	150	37	0	5	5	25
215	D-1	A18	18	173	20	1	4	4	23
642	D-2	A19	19	125	14	2	5	5	26
434	D-1	A20	20	237	43	2	4	4	24
30	D-2	A21	21	126	30	1	4	4	22
428	D-3	A22	22	140	24	0	5	5	24
272	D-3	A23	23	31	28.2	0	2	2	23
442	D-3	A24	24	56	21.5	0	3	3	24
562	D-2	B1	25	177	28	1	4	4	23
653	D-2	B2	26	104	27.8	2	3	3	26
237	D-1	B3	27	91	22.1	1	3	3	24

837	D-2	B4	28	DEAD	DEAD	DEAD	DEAD	DEAD	24
473	D-2	B5	29	106	26	1	4	4	22
48	D-1	B6	30	111	29	1	3	3	25
486	D-2	B7	31	103	25.3	1	5	5	25
363	D-1	B8	32	106	21	4	0	0	30
218	D-3	B9	33	67	26	0	2	2	21
169	D-1	B10	34	175	37	1	3	3	24
212	D-2	B11	35	98	29	0	5	5	26
1028	D-2	B12	36	DEAD	DEAD	DEAD	DEAD	DEAD	22
1039	D-3	B13	37	DEAD	DEAD	DEAD	DEAD	DEAD	25
496	D-1	B14	38	46	22	5	0	0	30
242	D-2	B15	39	64	32.2	0	6	7	27
278	D-2	B16	40	61	29	0	3	3	28
662	D-3	B17	41	78	32	0	4	5	29
46	D-2	B18	42	80	20	1	2	2	20
675	D-3	B19	43	DEAD	DEAD	DEAD	DEAD	DEAD	DEAD
596	D-1	B20	44	70	19	0	4	4	25
427	D-3	B21	45	93	34	0	4	5	27
883	D-3	B22	46	85	30	0	3	3	24
85	D-1	B23	47	62	47.5	0	5	7	38
480	D-2	B24	48	44	16	2	3	3	21
286	D-2	C1	49	80	31.5	0	2	2	24
447	D-2	C2	50	108	22	1	6	6	25
160	D-1	C3	51	82	23.2	0	4	4	24
409	D-2	C4	52	111	34.4	0	4	8	35
29	D-3	C5	53	159	39.4	3	4	4	25
506	D-3	C6	54	83	33	0	3	3	29
84	D-2	C7	55	59	14	2	3	3	25
121	D-3	C8	56	64	21	0	5	5	28
452	D-1	C9	57	90	28.5	0	4	4	30
41	D-3	C10	58	47	33	0	4	4	25
410	D-3	C11	59	78	26	0	4	4	23
661	D-1	C12	60	116	29.5	0	7	7	29

262	D-2	C13	61	61	33	1	3	3	29
535	D-1	C14	62	71	41.9	0	4	6	33
347	D-1	C15	63	116	32	2	3	3	26
249	D-3	C16	64	81	19.9	0	5	6	29
511	D-2	C17	65	95	29.5	0	4	4	26
56	D-1	C18	66	NO	NO	NO	NO	NO	NO
129	D-3	C19	67	107	37.1	1	3	3	29
222	D-3	C20	68	40	35	1	3	3	23
10	D-2	C21	69	134	29	0	1	6	36
627	D-2	C22	70	72	29.3	0	4	5	28
22	D-3	C23	71	78	25.6	0	3	3	25
639	D-2	C24	72	89	36	1	4	4	26
140	D-3	D1	73	55	16.7	0	3	3	29
112	D-2	D2	74	117	16	0	4	4	29
32	D-1	D3	75	74	8.5	0	5	5	27
75	D-1	D4	76	185	31	0	8	8	30
145	D-3	D5	77	179	34	0	7	7	29
215	D-2	D6	78	111	21.5	2	4	4	23
653	D-1	D7	79	136	28.9	1	3	3	27
831	D-1	D8	80	130	25	3	3	3	23
195	D-3	D9	81	154	30	2	3	3	27
945	D-2	D10	82	117	25	0	4	4	24
36	D-3	D11	83	168	58	0	6	7	33
524	D-3	D12	84	102	37	0	2	5	32
446	D-3	D13	85	80	25	0	6	6	33
6	D-2	D14	86	200	51	1	5	5	32
7	D-1	D15	87	50	22	0	3	3	26
581	D-1	D16	88	136	34	0	6	7	30
856	D-3	D17	89	92	30.5	2	3	3	26
137	D-2	D18	90	162	41	0	4	4	28
547	D-1	D19	91	108	22	0	4	4	26
129	D-1	D20	92	88	36	0	4	5	30
459	D-3	D21	93	138	36.1	0	4	4	27

424	D-2	D22	94	124	25	0	6	6	29	
563	D-2	D23	95	145	38	0	6	6	30	
664	D-1	D24	96	71	29	0	4	4	29	
286	D-1	E1	97	59	29.2	0	2	2	22	
590	D-1	E2	98	83	12.2	0	3	3	22	
52	D-1	E3	99	58	23.5	1	2	2	25	
355	D-1	E4	100	109	26	2	6	6	30	
600	D-1	E5	101	95	24.1	0	3	3	24	
166	D-3	E6	102	132	30	2	3	3	23	
75	D-3	E7	103	241	33.3	3	6	6	29	
518	D-1	E8	104	79	30	0	7	9	31	
422	D-1	E9	105	205	40	2	4	4	27	
203	D-1	E10	106	158	32	0	4	4	23	
246	D-1	E11	107	52	26.2	0	4	5	31	
247	D-3	E12	108	140	30	0	7	7	32	
640	D-3	E13	109	67	29.1	1	3	3	26	
233	D-3	E14	110	221	25.3	1	3	3	23	
111	D-3	E15	111	158	31	3	4	4	29	
244	D-1	E16	112	DEAD	DEAD	DEAD	DEAD	DEAD	24	
591	D-1	E17	113	76	27	3	3	3	26	
217	D-3	E18	114	71	18.7	2	4	4	25	
535	D-2	E19	115	83	41.5	0	3	7	35	
273	D-2	E20	116	77	28.3	0	3	3	26	
57	D-1	E21	117	132	25	0	5	5	25	
672	D-3	E22	118	133	40.2	0	4	4	28	
709	D-2	E23	119	123	33.4	0	5	6	29	
543	D-1	E24	120	90	31	0	4	6	31	
512	D-3	F1	121	145	20.1	3	3	3	22	
147	D-3	F2	122	134	32.2	0	7	7	28	
125	D-1	F3	123	87	34.5	0	3	6	30	
182	D-1	F4	124	101	37.5	0	7	7	30	
409	D-3	F5	125	140	34	0	6	6	32	
47	D-3	F6	126	54	24	0	3	3	24	

6	D-3	F7	127	NO	NO	NO	NO	NO	NO
492	D-2	F8	128	109	35.2	0	2	3	28
536	D-3	F9	129	142	40	3	4	4	26
823	D-1	F10	130	240	30	3	4	4	24
450	D-2	F11	131	93	29	0	3	3	22
258	D-1	F12	132	29	19	0	3	3	27
625	D-1	F13	133	140	16.5	3	5	5	26
479	D-1	F14	134	137	38.4	1	3	3	24
523	D-3	F15	135	158	37.8	3	4	4	26
194	D-2	F16	136	149	35.7	3	5	5	26
348	D-2	F17	137	134	34.4	1	4	4	28
246	D-2	F18	138	20	23.1	0	7	7	30
659	D-3	F19	139	135	27	0	3	4	29
247	D-2	F20	140	114	30	2	3	3	28
602	D-2	F21	141	115	26.6	1	4	4	25
331	D-3	F22	142	118	30.5	0	8	8	29
2	D-2	F23	143	172	28.5	3	3	3	22
44	D-2	F24	144	89	25.6	2	3	3	22
654	D-1	G1	145	126	49.5	0	4	6	35
186	D-2	G2	146	109	31	1	3	3	23
512	D-2	G3	147	121	24	1	3	3	24
151	D-1	G4	148	189	31	2	2	2	22
615	D-3	G5	149	154	30	3	3	3	23
80	D-3	G6	150	68	32	0	3	6	28
59	D-2	G7	151	203	32	3	3	3	25
560	D-2	G8	152	173	27.8	1	3	3	24
510	D-3	G9	153	171	40	2	5	5	30
131	D-1	G10	154	127	40	0	8	8	36
145	D-1	G11	155	247	45	1	7	7	28
131	D-2	G12	156	111	38	0	6	8	34
420	D-1	G13	157	94	22	1	3	3	24
422	D-2	G14	158	135	31	0	3	3	22
436	D-3	G15	159	208	37	2	4	4	26

281	D-2	G16	160	91	27.3	4	5	5	28
425	D-3	G17	161	162	30.8	3	4	4	24
479	D-2	G18	162	110	35	2	3	3	24
235	D-3	G19	163	87	29	0	3	3	27
439	D-1	G20	164	114	48	0	4	7	34
983	D-2	G21	165	81	19	2	3	3	22
185	D-3	G22	166	120	40	0	5	8	31
162	D-2	G23	167	83	33.3	3	5	5	28
573	D-3	G24	168	141	35.5	1	5	5	30
565	D-2	H1	169	111	28	1	4	4	23
197	D-2	H2	170	102	13	0	5	5	27
945	D-1	H3	171	118	23.3	3	3	3	23
592	D-3	H4	172	160	37	1	4	4	28
262	D-1	H5	173	65	36.5	1	2	2	26
455	D-3	H6	174	66	33.5	0	2	2	25
707	D-1	H7	175	142	38	0	7	7	30
17	D-2	H8	176	58	30.5	3	7	7	28
440	D-1	H9	177	88	34	1	4	4	24
425	D-2	H10	178	145	31	1	4	4	25
143	D-2	H11	179	133	57	1	5	8	37
302	D-2	H12	180	59	45.4	0	4	7	34
34	D-1	H13	181	NO	NO	NO	NO	NO	NO
151	D-3	H14	182	201	35	4	4	4	24
594	D-2	H15	183	210	36.5	4	3	3	25
238	D-3	H16	184	92	33.6	1	4	4	27
254	D-1	H17	185	160	29	3	3	3	24
252	D-1	H18	186	80	41.2	1	4	4	24
503	D-3	H19	187	142	35	2	3	3	28
44	D-3	H20	188	41	22	0	3	3	26
569	D-1	H21	189	32	11	0	1	5	33
666	D-3	H22	190	163	34.1	1	4	4	27
659	D-1	H23	191	67	31	0	3	5	36
593	D-3	H24	192	91	23.6	0	4	4	23

44	D-1	I1	193	109	22.1	2	3	3	24
166	D-2	I2	194	117	37.3	1	3	3	25
347	D-3	I3	195	128	26.5	2	4	4	24
983	D-1	I4	196	143	41.3	1	5	5	27
496	D-3	I5	197	145	31.3	3	7	7	29
519	D-3	I6	198	142	33	0	6	6	30
290	D-1	I7	199	180	32.5	3	3	3	23
156	D-3	I8	200	168	41.6	1	5	5	26
833	D-2	I9	201	138	25.2	2	3	3	26
224	D-3	I10	202	87	27.5	1	5	5	26
416	D-3	I11	203	183	36.8	3	6	6	26
837	D-3	I12	204	DEAD	DEAD	DEAD	DEAD	DEAD	DEAD
53	D-2	I13	205	185	26.7	3	6	6	23
92	D-3	I14	206	144	28.9	3	3	3	30
831	D-3	I15	207	99	31.5	1	3	3	24
270	D-1	I16	208	148	35	0	4	4	25
494	D-1	I17	209	112	32	0	7	8	32
156	D-1	I18	210	174	38	1	4	4	25
18	D-1	I19	211	136	29.2	2	3	3	24
76	D-2	I20	212	101	27	3	4	4	27
241	D-2	I21	213	87	32.8	0	6	6	32
125	D-2	I22	214	124	39	0	5	8	35
547	D-3	I23	215	117	27	0	5	5	24
352	D-1	I24	216	80	38	0	4	4	29
506	D-1	J1	217	146	31	1	4	4	27
474	D-1	J2	218	162	28	2	3	3	23
25	D-1	J3	219	108	34.2	1	3	3	26
607	D-2	J4	220	179	14	2	3	3	25
453	D-2	J5	221	99	26	0	5	5	29
97	D-3	J6	222	139	26	2	3	3	22
482	D-3	J7	223	130	33	0	6	6	29
628	D-3	J8	224	118	17	0	4	4	24
445	D-2	J9	225	183	38	0	5	5	29

610	D-1	J10	226	123	27.2	2	3	3	23	
457	D-3	J11	227	129	39.6	0	4	4	25	
719	D-3	J12	228	84	11	0	4	4	26	
55	D-3	J13	229	204	19	1	3	3	22	
611	D-2	J14	230	187	34	0	5	5	26	
42	D-2	J15	231	93	23	0	3	3	24	
606	D-3	J16	232	141	23	1	4	4	23	
94	D-1	J17	233	135	26	0	4	4	24	
48	D-3	J18	234	137	33	1	3	3	24	
719	D-2	J19	235	29	9.8	0	4	4	23	
665	D-1	J20	236	110	38	1	2	2	21	
603	D-1	J21	237	101	28.6	0	5	5	29	
480	D-3	J22	238	63	20	2	2	2	19	
219	D-1	J23	239	83	37.4	0	3	3	28	
849	D-3	J24	240	108	14	3	3	3	22	
358	D-1	K1	241	51	35.1	3	3	3	24	
118	D-1	K2	242	78	29	0	3	3	26	
508	D-3	K3	243	136	32	1	4	4	25	
581	D-2	K4	244	142	34.7	0	5	5	29	
665	D-2	K5	245	125	36.5	1	2	2	21	
436	D-2	K6	246	108	31.1	1	5	5	25	
155	D-1	K7	247	192	30.2	3	4	4	28	
260	D-2	K8	248	71	38.3	0	3	3	24	
596	D-2	K9	249	184	36.8	2	4	4	27	
355	D-2	K10	250	130	28.8	2	5	5	26	
301	D-1	K11	251	100	34	0	3	3	27	
652	D-2	K12	252	134	34	2	4	4	28	
183	D-3	K13	253	58	30	0	4	4	32	
575	D-2	K14	254	129	30.7	0	4	4	23	
248	D-3	K15	255	63	34.8	0	3	4	29	
275	D-1	K16	256	77	30.5	2	3	3	26	
97	D-2	K17	257	81	31.9	1	2	2	21	
523	D-2	K18	258	132	36	0	4	4	24	

590	D-3	K19	259	83	14.8	0	4	4	22	
467	D-2	K20	260	135	23	3	3	3	23	
554	D-1	K21	261	91	25	1	4	4	25	
462	D-1	K22	262	158	30	1	3	3	23	
300	D-2	K23	263	95	24	1	3	3	22	
855	D-3	K24	264	7	13	2	1	1	21	
278	D-1	L1	265	109	32	1	5	5	27	
415	D-3	L2	266	174	28.7	2	4	4	22	
420	D-2	L3	267	108	24	2	3	3	23	
511	D-1	L4	268	98	26	0	4	4	24	
543	D-3	L5	269	132	41	0	5	5	30	
249	D-1	L6	270	124	30	0	4	5	27	
232	D-1	L7	271	116	31	0	4	4	26	
617	D-1	L8	272	177	42	0	6	6	31	
459	D-2	L9	273	199	45	0	6	6	29	
600	D-2	L10	274	61	25.1	0	3	3	25	
463	D-3	L11	275	141	35.2	0	5	5	29	
449	D-2	L12	276	170	47.3	2	3	3	29	
98	D-2	L13	277	130	28	0	3	3	25	
78	D-2	L14	278	41	27	0	3	5	33	
472	D-3	L15	279	148	20.1	3	2	2	21	
232	D-2	L16	280	85	29	1	4	4	25	
494	D-3	L17	281	118	28	3	4	4	29	
641	D-1	L18	282	80	30	0	5	5	28	
610	D-2	L19	283	149	23	3	3	3	23	
738	D-1	L20	284	95	22	0	4	4	28	
513	D-1	L21	285	79	24	1	2	2	20	
137	D-1	L22	286	46	25	1	3	3	26	
1032	D-3	L23	287	72	18	1	3	3	31	
114	D-1	L24	288	101	28	0	5	5	23	
566	D-2	M1	289	125	29	1	3	3	24	
191	D-2	M2	290	73	20	1	2	2	23	
736	D-2	M3	291	97	28.8	0	3	3	26	

354	D-3	M4	292	169	33.6	3	6	6	28	
828	D-3	M5	293	145	37	0	6	6	29	
75	D-2	M6	294	217	38.2	0	8	8	32	
486	D-3	M7	295	179	34	3	5	5	26	
518	D-2	M8	296	158	44.2	0	6	6	31	
562	D-1	M9	297	273	40	2	3	3	23	
286	D-3	M10	298	115	34	0	3	3	22	
200	D-2	M11	299	156	36	0	6	6	29	
336	D-3	M12	300	119	25	1	3	3	22	
591	D-2	M13	301	178	26.1	4	3	3	24	
738	D-2	M14	302	125	31	1	5	5	28	
163	D-2	M15	303	65	52.1	0	3	3	29	
856	D-2	M16	304	126	33	3	3	3	25	
159	D-2	M17	305	108	33	1	2	2	20	
496	D-2	M18	306	91	36	2	5	5	30	
623	D-2	M19	307	108	29.6	1	4	4	25	
204	D-2	M20	308	132	29	0	4	4	27	
685	D-3	M21	309	208	40	1	3	3	22	
348	D-1	M22	310	152	34.2	0	6	6	28	
536	D-1	M23	311	147	35	0	4	4	29	
628	D-1	M24	312	71	16	2	3	3	23	
264	D-1	N1	313	121	36.5	1	5	5	30	
474	D-3	N2	314	98	Main stem broken		3	NO	NO	22
652	D-1	N3	315	93	32.8	1	4	4	27	
523	D-1	N4	316	132	36	0	5	5	25	
688	D-2	N5	317	130	43	3	3	3	24	
95	D-3	N6	318	10	36	0	4	6	33	
96	D-3	N7	319	181	32	4	3	3	26	
434	D-2	N8	320	176	46	2	3	3	25	
460	D-2	N9	321	193	41.5	1	6	6	28	
722	D-2	N10	322	108	42	0	3	3	26	
589	D-1	N11	323	172	41	2	4	4	25	
55	D-2	N12	324	109	20.2	1	3	3	23	

140	D-2	N13	325	133	46.5	1	5	5	30
1028	D-3	N14	326	192	22	4	4	4	25
104	D-1	N15	327	189	30	3	1	1	22
444	D-1	N16	328	128	37	2	3	3	25
446	D-1	N17	329	117	30.4	0	7	7	33
472	D-2	N18	330	216	20	2	3	3	22
726	D-3	N19	331	105	20	2	3	3	25
92	D-1	N20	332	174	28.5	5	4	4	27
3	D-3	N21	333	168	38	4	4	4	29
620	D-2	N22	334	121	36	1	5	5	30
413	D-2	N23	335	190	21	3	3	3	24
97	D-1	N24	336	73	28	2	3	3	23
176	D-1	O1	337	142	33	3	3	3	23
158	D-2	O2	338	61	28.5	0	3	3	31
12	D-2	O3	339	251	45.7	3	4	4	25
129	D-2	O4	340	139	44.5	1	4	4	25
47	D-2	O5	341	83	26	2	2	2	22
566	D-1	O6	342	132	31	2	3	3	24
589	D-3	O7	343	213	34	2	6	6	24
212	D-1	O8	344	202	39.8	4	4	4	25
233	D-1	O9	345	141	35.6	2	3	3	24
594	D-3	O10	346	103	33.3	1	3	3	26
134	D-1	O11	347	142	34	2	2	2	22
188	D-2	O12	348	140	32	2	4	4	25
165	D-2	O13	349	117	35	2	3	3	24
270	D-2	O14	350	168	35.5	4	3	3	25
504	D-1	O15	351	141	29	3	3	3	24
727	D-2	O16	352	140	41.5	2	4	4	24
18	D-3	O17	353	172	36	3	3	3	24
257	D-1	O18	354	63	31.5	0	3	3	26
415	D-2	O19	355	155	26	3	2	2	21
210	D-2	O20	356	145	19.5	1	4	4	22
237	D-2	O21	357	143	33	3	3	3	25

641	D-2	O22	358	132	37	0	6	6	29
71	D-2	O23	359	63	18	0	3	3	23
685	D-1	O24	360	75	25	2	0	0	21
71	D-3	P1	361	92	18	0	3	3	23
580	D-2	P2	362	141	34	3	3	3	25
945	D-3	P3	363	127	29	2	3	3	22
738	D-3	P4	364	139	30	0	5	5	26
424	D-1	P5	365	106	26	0	4	4	26
38	D-2	P6	366	127	38.7	1	3	3	22
165	D-1	P7	367	110	32	3	3	3	24
503	D-2	P8	368	94	28	1	4	4	29
160	D-2	P9	369	129	21	2	3	3	26
403	D-2	P10	370	161	26.8	1	3	3	25
12	D-1	P11	371	175	36.4	3	3	3	27
57	D-3	P12	372	96	20	1	4	4	23
640	D-1	P13	373	55	25.8	1	4	4	22
642	D-1	P14	374	112	9	3	7	7	27
116	D-2	P15	375	72	18	2	4	4	30
43	D-1	P16	376	117	34	2	4	4	30
158	D-1	P17	377	66	16	1	5	6	31
354	D-2	P18	378	105	20	4	4	4	28
503	D-1	P19	379	150	31.4	2	4	4	30
49	D-3	P20	380	164	27	0	6	6	30
856	D-1	P21	381	112	21	0	3	3	23
558	D-1	P22	382	94	25	1	3	3	21
602	D-1	P23	383	107	28	2	2	2	23
1021	D-3	P24	384	DEAD	DEAD	DEAD	DEAD	DEAD	DEAD
400	D-2	Q1	385	256	39	3	5	5	24
534	D-2	Q2	386	78	29.5	1	4	4	21
164	D-3	Q3	387	63	30	1	3	3	24
247	D-1	Q4	388	159	29	5	5	5	26
241	D-3	Q5	389	97	31	0	4	4	29
501	D-1	Q6	390	136	48	1	3	3	25

167	D-3	Q7	391	113	34	0	4	4	23	
450	D-3	Q8	392	111	32	2	3	3	21	
518	D-3	Q9	393	79	32.5	0	3	3	28	
121	D-2	Q10	394	97	33.8	2	3	3	26	
223	D-3	Q11	395	117	37	4	4	4	25	
27	D-1	Q12	396	129	26 (broken)		3	3	3	28
609	D-3	Q13	397	123	37.5	2	3	3	23	
439	D-3	Q14	398	141	37.4	0	7	8	30	
46	D-1	Q15	399	220	34	2	2	2	20	
489	D-3	Q16	400	61	33	1	3	3	22	
176	D-3	Q17	401	157	30.5	1	4	4	24	
579	D-1	Q18	402	110	29	1	4	4	22	
654	D-3	Q19	403	160	43.3	0	5	7	35	
719	D-1	Q20	404	94	13.9	1	4	4	25	
167	D-2	Q21	405	71	32	1	2	2	28	
76	D-1	Q22	406	126	28.1	3	3	3	25	
528	D-2	Q23	407	137	10	2	1	1	21	
441	D-1	Q24	408	121	32	2	4	4	26	
295	D-1	R1	409	119	31.2	3	3	3	24	
230	D-2	R2	410	109	30	2	4	4	26	
24	D-2	R3	411	179	22	1	4	4	22	
647	D-3	R4	412	86	18	2	1	1	21	
467	D-1	R5	413	DEAD	DEAD	DEAD	DEAD	DEAD	24	
275	D-3	R6	414	93	27	3	3	3	29	
675	D-1	R7	415	123	36.5	0	5	5	25	
425	D-1	R8	416	147	37	4	4	4	23	
85	D-2	R9	417	4	14.5	0	5	5	48	
41	D-1	R10	418	164	36	3	3	3	23	
863	D-2	R11	419	159	26	3	3	3	22	
482	D-2	R12	420	115	34.2	0	8	8	32	
823	D-2	R13	421	136	35	3	3	3	25	
162	D-3	R14	422	147	38.6	3	3	3	31	
472	D-1	R15	423	191	22	2	2	2	22	

611	D-3	R16	424	170	35.5	1	5	5	29
112	D-3	R17	425	128	28.5	0	5	5	28
610	D-3	R18	426	109	28.4	2	2	2	25
626	D-1	R19	427	102	27.3	1	3	3	27
168	D-2	R20	428	112	28.4	2	3	3	25
4	D-1	R21	429	88	29	0	5	5	25
462	D-3	R22	430	161	29	1	4	4	23
281	D-1	R23	431	122	28	3	4	4	28
214	D-3	R24	432	157	19	2	3	3	21
437	D-3	S1	433	144	32	4	3	3	25
96	D-2	S2	434	151	29	2	3	3	27
197	D-1	S3	435	138	14.3	2	3	3	24
118	D-3	S4	436	154	36.5	1	3	3	23
341	D-1	S5	437	94	21.6	3	5	6	29
341	D-3	S6	438	49	26	0	2	5	34
411	D-3	S7	439	128	38	0	7	7	31
198	D-1	S8	440	191	52.5	2	6	6	35
611	D-1	S9	441	253	35.8	1	6	6	29
736	D-1	S10	442	153	34.7	0	7	8	31
560	D-3	S11	443	192	30.6	1	3	3	24
219	D-2	S12	444	1323	49	0	4	4	28
217	D-1	S13	445	89	26	1	4	4	23
49	D-1	S14	446	188	36	0	6	6	30
21	D-3	S15	447	NO	NO	NO	NO	NO	NO
272	D-2	S16	448	150	38	0	4	4	28
84	D-1	S17	449	119	17.5	2	4	4	25
562	D-3	S18	450	148	33	3	2	2	23
641	D-3	S19	451	103	31.4	0	8	8	31
302	D-3	S20	452	102	37.2	0	6	6	28
476	D-2	S21	453	182	24	2	3	3	23
720	D-3	S22	454	125	16.6	4	2	2	21
199	D-3	S23	455	131	22.8	0	4	4	25
567	D-3	S24	456	NO	NO	NO	NO	NO	NO

551	D-1	T1	457	169	37	1	4	4	32
114	D-3	T2	458	141	31.6	0	5	5	27
572	D-1	T3	459	118	29.4	0	7	7	31
239	D-3	T4	460	71	25	1	3	3	22
272	D-1	T5	461	71	24	0	4	4	27
2	D-1	T6	462	189	40	1	4	4	29
295	D-2	T7	463	94	11	1	4	4	24
1033	D-2	T8	464	165	32.5	1	4	4	25
854	D-3	T9	465	222	27	2	3	3	23
273	D-1	T10	466	91	35	1	3	3	26
130	D-1	T11	467	67	30.5	0	4	4	24
460	D-1	T12	468	94	30.3	0	6	6	31
131	D-3	T13	469	154	37.5	0	7	7	33
555	D-2	T14	470	168	33	1	3	3	23
302	D-1	T15	471	176	50	0	7	7	32
143	D-1	T16	472	42	38.1	0	3	5	31
485	D-2	T17	473	56	13	0	1	1	31
203	D-3	T18	474	211	32	2	5	5	23
252	D-2	T19	475	DEAD	DEAD	DEAD	DEAD	DEAD	21
141	D-1	T20	476	137	26	0	5	5	24
3	D-1	T21	477	250	40.5	4	5	5	29
365	D-2	T22	478	129	34	2	3	3	28
175	D-1	T23	479	149	27	0	5	5	24
464	D-2	T24	480	85	38.5	0	3	3	25
553	D-1	U1	481	237	31	2	5	5	27
707	D-3	U2	482	226	39	1	7	7	31
261	D-1	U3	483	204	28	2	2	2	21
220	D-3	U4	484	104	26	0	5	5	27
68	D-2	U5	485	104	30	3	3	3	23
58	D-3	U6	486	80	15	2	3	3	22
164	D-2	U7	487	175	34.9	2	3	3	22
432	D-1	U8	488	194	19	4	3	3	25
72	D-1	U9	489	289	30.3	2	5	5	24

1	D-1	U10	490	253	28.1	4	2	2	21
662	D-2	U11	491	124	31.7	0	7	7	31
258	D-3	U12	492	87	31.5	0	3	3	30
598	D-3	U13	493	108	29	0	4	5	30
220	D-1	U14	494	63	20	1	4	4	25
363	D-3	U15	495	62	23	4	4	4	29
204	D-1	U16	496	63	31	0	5	5	31
535	D-3	U17	497	95	58	1	1	3	34
242	D-3	U18	498	144	36.4	2	5	5	25
235	D-2	U19	499	72	27	0	3	3	28
34	D-2	U20	500	106	26	0	6	6	28
697	D-1	U21	501	72	29.2	3	8	8	31
983	D-3	U22	502	61	27.1	2	3	3	22
563	D-1	U23	503	79	33	0	6	6	30
170	D-2	U24	504	146	16	2	3	3	22
534	D-3	V1	505	15	14.5	0	2	2	22
112	D-1	V2	506	156	29	2	6	6	31
603	D-2	V3	507	66	18.2	0	5	5	29
410	D-2	V4	508	93	32	2	3	3	23
352	D-3	V5	509	88	35.5	1	2	2	29
720	D-2	V6	510	167	22.5	3	3	3	23
67	D-1	V7	511	128	28.4	3	1	1	20
67	D-3	V8	512	181	33	2	3	3	21
806	D-1	V9	513	150	32.3	2	3	3	25
662	D-1	V10	514	99	31.5	0	8	8	32
628	D-2	V11	515	81	20	1	2	2	22
491	D-1	V12	516	46	20.3	0	6	6	31
241	D-1	V13	517	58	23	0	4	4	30
281	D-3	V14	518	166	27	4	6	6	29
411	D-1	V15	519	96	37.1	0	6	7	31
504	D-2	V16	520	138	24.5	0	4	4	24
115	D-1	V17	521	130	25.1	2	3	3	21
89	D-3	V18	522	106	23	2	3	3	23

36	D-2	V19	523	130	43.2	0	3	5	27
10	D-1	V20	524	112	46	1	2	2	37
580	D-1	V21	525	152	27.4	1	4	4	24
4	D-3	V22	526	151	25	3	3	3	25
721	D-1	V23	527	DEAD	DEAD	DEAD	DEAD	DEAD	DEAD
32	D-2	V24	528	98	12	1	4	4	25
114	D-2	W1	529	124	28.8	0	6	6	24
654	D-2	W2	530	138	56	0	5	5	35
463	D-1	W3	531	148	40	0	5	5	29
301	D-2	W4	532	126	39	1	4	1	26
653	D-3	W5	533	93	23.5	0	5	5	27
564	D-2	W6	534	111	41	0	3	4	28
72	D-3	W7	535	143	29	1	3	3	23
707	D-2	W8	536	157	39.5	1	6	6	31
688	D-3	W9	537	108	37.1	1	3	3	24
536	D-2	W10	538	155	39.5	0	6	6	30
566	D-3	W11	539	130	32.1	2	2	2	24
59	D-3	W12	540	130	31	2	2	2	24
248	D-1	W13	541	61	25.1	0	3	3	25
451	D-1	W14	542	190	25	2	4	4	23
529	D-2	W15	543	172	29	1	5	5	25
473	D-1	W16	544	175	26.8	1	3	3	22
103	D-2	W17	545	111	26	0	4	4	29
273	D-3	W18	546	112	35	3	4	4	26
265	D-1	W19	547	88	29	1	3	3	24
176	D-2	W20	548	205	25	3	3	3	23
1033	D-3	W21	549	168	15.9	2	2	2	21
38	D-1	W22	550	172	22	3	2	2	21
203	D-2	W23	551	178	26	1	6	6	23
200	D-3	W24	552	150	31.2	0	9	10	29
617	D-2	X1	553	106	49.8	0	6	9	35
533	D-3	X2	554	104	15.2	1	3	3	20
155	D-2	X3	555	198	21.9	2	4	4	23

204	D-3	X4	556	138	26.7	0	5	5	28	
709	D-1	X5	557	120	33.5	0	5	5	25	
95	D-2	X6	558	125	44	0	2	7	34	
187	D-1	X7	559	127	28.3	4	5	5	27	
722	D-3	X8	560	147	38	0	3	3	25	
230	D-3	X9	561	146	35.8	1	4	4	27	
414	D-3	X10	562	129	18.5	0	4	7	35	
709	D-3	X11	563	119	36	1	4	4	25	
84	D-3	X12	564	133	17	2	4	4	24	
128	D-1	X13	565	99	38.5	0	4	8	40	
243	D-1	X14	566	309	37	6	6	6	27	
160	D-3	X15	567	121	21.4	1	4	4	25	
541	D-3	X16	568	67	20	0	2	2	25	
541	D-1	X17	569	121	27.3	1	4	4	26	
179	D-1	X18	570	114	25.2	1	3	3	20	
49	D-2	X19	571	137	33	0	6	6	31	
271	D-2	X20	572	89	21.3	2	3	3	25	
278	D-3	X21	573	159	38	3	3	3	29	
41	D-2	X22	574	250	36	3	4	4	24	
651	D-1	X23	575	94	21	0	3	3	23	
300	D-3	X24	576	119	31	1	4	4	23	
806	D-2	Y1	577	146	11	3	1	1	22	
260	D-3	Y2	578	74	25	1	3	3	21	
26	D-3	Y3	579	156	38.2	1	5	5	29	
47	D-1	Y4	580	74	25.5	2	2	2	25	
457	D-2	Y5	581	162	30	2	5	5	25	
352	D-2	Y6	582	65	32.7	1	3	3	25	
688	D-1	Y7	583	123	8	2	0	1	22	
459	D-1	Y8	584	145	44.2	0	8	8	33	
833	D-1	Y9	585	150	22	0	4	4	25	
228	D-2	Y10	586	99	27.1	0	3	3	24	
186	D-1	Y11	587	65	21	0	4	4	24	
187	D-2	Y12	588	96	25.5	0	4	6	30	

440	D-2	Y13	589	134	23	2	3	3	22
178	D-3	Y14	590	152	24.3	1	3	3	21
485	D-3	Y15	591	167	14	2	4	4	28
9	D-3	Y16	592	124	37.5	2	4	4	23
672	D-1	Y17	593	196	42.2	1	5	5	29
225	D-3	Y18	594	124	23.5	3	2	2	21
471	D-1	Y19	595	99	34.5	1	4	4	32
703	D-2	Y20	596	152	23.5	1	5	5	25
429	D-3	Y21	597	98	22	0	4	5	24
414	D-1	Y22	598	146	20.4	0	6	7	33
448	D-3	Y23	599	228	31	3	4	4	27
835	D-1	Y24	600	77	19	1	4	4	22
301	D-3	Z1	601	67	45	3	5	5	30
338	D-2	Z2	602	181	35.5	1	4	4	24
224	D-2	Z3	603	67	31	2	4	4	26
554	D-3	Z4	604	134	33.6	2	4	4	27
500	D-1	Z5	605	88	32.4	0	4	4	29
428	D-2	Z6	606	87	24.8	0	6	6	24
461	D-3	Z7	607	110	41.6	0	4	4	26
140	D-1	Z8	608	101	39.7	3	2	2	27
497	D-1	Z9	609	272	34	3	3	3	24
661	D-3	Z10	610	212	41.6	1	8	8	31
7	D-2	Z11	611	42	32	1	1	1	24
471	D-2	Z12	612	105	41	1	5	5	33
467	D-3	Z13	613	235	29.8	3	4	4	24
128	D-3	Z14	614	172	38	0	7	7	38
403	D-3	Z15	615	222	38.2	3	3	3	25
195	D-1	Z16	616	123	31.4	3	5	5	30
182	D-2	Z17	617	187	43	1	6	6	29
354	D-1	Z18	618	128	35	3	6	6	30
594	D-1	Z19	619	159	35	3	3	3	27
109	D-3	Z20	620	100	40	0	4	4	26
403	D-1	Z21	621	214	38.5	2	3	3	25

228	D-3	Z22	622	89	23.4	0	3	3	23
508	D-1	Z23	623	170	38	1	4	4	27
68	D-3	Z24	624	148	36	2	4	4	24
103	D-1	AA1	625	127	35	0	6	6	30
727	D-1	AA2	626	111	34	1	6	6	26
266	D-3	AA3	627	76	33	1	2	2	30
563	D-3	AA4	628	97	33.5	0	5	5	29
623	D-3	AA5	629	142	33.6	3	4	4	26
444	D-3	AA6	630	55	19	0	3	3	23
455	D-1	AA7	631	102	36	1	3	3	24
262	D-3	AA8	632	155	51	3	4	4	26
602	D-3	AA9	633	143	36	2	4	4	25
126	D-3	AA10	634	157	40.6	0	5	5	30
1	D-2	AA11	635	138	21.5	3	3	3	21
686	D-3	AA12	636	NO	NO	NO	NO	NO	24
721	D-2	AA13	637	NO	NO	NO	NO	NO	DEAD
504	D-3	AA14	638	162	32	4	3	3	25
888	D-1	AA15	639	103	38.7	0	4	4	27
437	D-1	AA16	640	98	35	2	3	3	26
591	D-3	AA17	641	144	30	2	3	3	23
195	D-2	AA18	642	72	31	2	2	2	29
279	D-3	AA19	643	81	15	0	3	3	25
136	D-3	AA20	644	227	39	5	7	7	29
608	D-1	AA21	645	127	40	0	5	5	29
336	D-1	AA22	646	139	23	3	3	3	21
36	D-1	AA23	647	129	45.4	0	4	6	32
461	D-2	AA24	648	154	39.1	1	3	3	28
216	D-2	AB1	649	124	25	2	4	4	26
295	D-3	AB2	650	94	15	1	4	4	24
54	D-2	AB3	651	178	51.5	0	7	7	30
446	D-2	AB4	652	166	44.4	0	7	7	33
663	D-3	AB5	653	172	32	2	3	3	22
331	D-2	AB6	654	137	39.3	0	6	6	28

1039	D-1	AB7	655	173	35	2	4	4	27
259	D-3	AB8	656	200	44	0	6	6	30
419	D-3	AB9	657	120	29.6	1	4	4	28
533	D-2	AB10	658	72	28	1	2	2	21
1032	D-1	AB11	659	DEAD	DEAD	DEAD	DEAD	DEAD	DEAD
495	D-2	AB12	660	134	31.6	3	3	3	23
408	D-3	AB13	661	196	43.5	2	6	6	30
198	D-2	AB14	662	223	44	0	7	7	35
435	D-1	AB15	663	170	46	2	3	3	27
442	D-1	AB16	664	107	32	1	4	4	27
642	D-3	AB17	665	120	16	2	4	4	25
1028	D-1	AB18	666	190	17.8	2	3	3	23
130	D-3	AB19	667	98	38.6	0	4	4	23
244	D-2	AB20	668	89	33.5	1	4	4	26
664	D-2	AB21	669	151	41	0	5	5	31
806	D-3	AB22	670	139	34	1	4	4	23
452	D-3	AB23	671	93	33	0	3	5	30
615	D-1	AB24	672	147	32.5	3	3	3	23
30	D-1	AC1	673	176	33	3	2	2	21
557	D-1	AC2	674	148	36.8	5	2	2	24
155	D-3	AC3	675	231	35.5	2	3	3	24
42	D-1	AC4	676	123	34.5	1	2	2	25
78	D-1	AC5	677	75	61.3	0	5	7	40
225	D-1	AC6	678	97	31	3	3	3	22
24	D-3	AC7	679	193	23	2	3	3	19
300	D-1	AC8	680	89	34	1	4	4	23
3	D-2	AC9	681	261	45	4	6	6	30
420	D-3	AC10	682	180	30.5	2	4	4	25
106	D-2	AC11	683	158	38.7	3	6	6	30
168	D-1	AC12	684	160	32.5	4	3	3	26
53	D-1	AC13	685	227	34	5	4	4	25
477	D-3	AC14	686	237	45	2	5	5	26
575	D-1	AC15	687	183	35.4	3	4	4	26

608	D-2	AC16	688	169	45.2	0	5	5	29
55	D-1	AC17	689	109	20.5	3	3	3	22
217	D-2	AC18	690	108	30	5	3	3	23
530	D-3	AC19	691	131	36	0	6	6	30
115	D-2	AC20	692	254	35.5	2	4	4	21
332	D-3	AC21	693	123	31	1	4	4	27
600	D-3	AC22	694	121	33.4	1	3	3	24
210	D-3	AC23	695	96	20.3	2	3	3	22
675	D-2	AC24	696	64	28.8	2	3	3	27
697	D-3	AD1	697	253	39	3	9	9	30
260	D-1	AD2	698	133	26	1	3	3	21
511	D-3	AD3	699	322	40	5	5	5	27
524	D-2	AD4	700	57	32.4	0	3	5	DEAD
190	D-2	AD5	701	122	38	1	4	4	28
182	D-3	AD6	702	303	23.2	4	4	4	23
727	D-3	AD7	703	115	27	1	4	4	24
481	D-2	AD8	704	249	47.4	0	7	7	32
197	D-3	AD9	705	189	18	3	5	5	28
188	D-3	AD10	706	DEAD	DEAD	DEAD	DEAD	DEAD	22
402	D-2	AD11	707	138	36.9	1	4	4	26
626	D-3	AD12	708	DEAD	DEAD	DEAD	DEAD	DEAD	DEAD
76	D-3	AD13	709	233	37.4	4	2	2	26
497	D-2	AD14	710	175	22	2	3	3	24
463	D-2	AD15	711	84	30.4	0	3	3	27
194	D-3	AD16	712	229	33	4	4	4	27
109	D-1	AD17	713	117	34.2	2	5	5	27
133	D-1	AD18	714	181	27.1	2	6	6	31
267	D-1	AD19	715	174	30	2	4	4	26
95	D-1	AD20	716	99	39.1	1	5	7	31
257	D-2	AD21	717	71	31	2	3	3	26
218	D-2	AD22	718	151	24	2	2	2	22
38	D-3	AD23	719	243	34	4	3	3	24
151	D-2	AD24	720	170	23.5	2	2	2	22

883	D-2	AE1	721	DEAD	DEAD	DEAD	DEAD	DEAD	23
625	D-3	AE2	722	170	16	2	5	5	26
115	D-3	AE3	723	114	18	2	3	3	21
555	D-1	AE4	724	119	31	0	4	4	23
162	D-1	AE5	725	109	38	0	5	5	27
224	D-1	AE6	726	98	30.8	0	4	4	23
543	D-2	AE7	727	144	46	1	5	5	31
400	D-1	AE8	728	166	39.2	2	4	4	25
489	D-1	AE9	729	114	37.5	2	3	3	23
358	D-3	AE10	730	55	11	2	2	2	22
732	D-2	AE11	731	109	32	2	3	3	26
12	D-3	AE12	732	153	35	2	3	3	25
87	D-2	AE13	733	132	33	1	2	2	24
121	D-1	AE14	734	190	44.5	3	4	4	27
106	D-1	AE15	735	167	40	0	6	6	31
185	D-2	AE16	736	85	36	0	5	9	31
462	D-2	AE17	737	203	31	2	3	3	25
691	D-3	AE18	738	156	38	2	3	3	27
222	D-2	AE19	739	84	30	3	4	4	23
828	D-1	AE20	740	DEAD	DEAD	DEAD	DEAD	DEAD	DEAD
264	D-2	AE21	741	135	43.3	0	8	8	32
665	D-3	AE22	742	200	29.7	2	3	3	23
100	D-3	AE23	743	89	18	0	5	5	29
118	D-2	AE24	744	94	24.5	0	3	3	24
464	D-3	AF1	745	182	32	2	4	4	24
116	D-1	AF2	746	121	26.8	3	3	3	26
28	D-2	AF3	747	100	20	1	3	3	21
190	D-1	AF4	748	134	31	2	4	4	28
429	D-2	AF5	749	185	38	2	4	4	26
180	D-1	AF6	750	53	28	1	7	7	30
233	D-2	AF7	751	165	34	3	3	3	22
89	D-1	AF8	752	184	31	2	4	4	23
555	D-3	AF9	753	35	9	2	0	0	23

596	D-3	AF10	754	132	33	1	3	3	27
691	D-2	AF11	755	DEAD	DEAD	DEAD	DEAD	DEAD	23
67	D-2	AF12	756	98	26	1	3	3	24
147	D-1	AF13	757	161	41	3	4	4	25
125	D-3	AF14	758	182	55	1	6	6	31
564	D-3	AF15	759	109	36.9	0	3	4	30
617	D-3	AF16	760	152	39.9	0	7	7	32
212	D-3	AF17	761	130	29.3	0	5	5	29
271	D-3	AF18	762	80	20.5	4	4	4	29
414	D-2	AF19	763	131	18	0	6	8	33
252	D-3	AF20	764	124	32.1	0	3	3	22
30	D-3	AF21	765	118	26	3	4	4	22
648	D-2	AF22	766	112	25	2	3	3	21
551	D-3	AF23	767	153	29	2	4	4	28
96	D-1	AF24	768	113	25	3	3	3	28
607	D-3	AG1	769	92	14	4	3	3	26
441	D-2	AG2	770	86	38	0	5	5	27
80	D-1	AG3	771	91	37.1	0	5	6	27
572	D-3	AG4	772	129	42	0	5	7	33
529	D-3	AG5	773	121	30	1	4	4	26
279	D-1	AG6	774	114	16	2	3	3	22
651	D-2	AG7	775	107	32.6	1	2	2	25
672	D-2	AG8	776	145	42.1	0	5	5	29
598	D-1	AG9	777	98	40	0	4	4	30
56	D-3	AG10	778	138	41	0	4	4	25
685	D-2	AG11	779	168	37	2	3	3	25
609	D-2	AG12	780	67	40	2	3	3	24
687	D-2	AG13	781	79	12	1	2	2	22
269	D-1	AG14	782	170	39	2	5	5	28
464	D-1	AG15	783	203	39.2	2	3	3	26
501	D-3	AG16	784	94	30.7	0	3	3	26
243	D-2	AG17	785	156	30	2	5	5	27
183	D-2	AG18	786	NO	NO	NO	NO	NO	NO

726	D-1	AG19	787	125	19.8	2	3	3	26
159	D-1	AG20	788	167	31	4	2	2	20
358	D-2	AG21	789	112	34	2	3	3	24
529	D-1	AG22	790	55	26	0	4	4	26
565	D-3	AG23	791	102	26	1	4	4	25
87	D-1	AG24	792	116	32.8	0	3	3	27
178	D-2	AH1	793	156	41	2	4	4	27
658	D-1	AH2	794	131	41	0	4	6	33
239	D-2	AH3	795	80	25.2	0	3	3	23
216	D-1	AH4	796	132	23	3	4	4	25
10	D-3	AH5	797	150	39.4	0	3	3	37
687	D-3	AH6	798	DEAD	DEAD	DEAD	DEAD	DEAD	21
266	D-1	AH7	799	67	29	0	3	4	30
460	D-3	AH8	800	197	41	1	6	6	30
137	D-3	AH9	801	133	36.8	0	4	6	31
1033	D-1	AH10	802	143	19.1	2	3	3	24
520	D-3	AH11	803	90	11	2	2	2	22
648	D-3	AH12	804	11	9	3	0	0	23
54	D-1	AH13	805	104	40.5	0	5	5	29
134	D-3	AH14	806	161	27	3	2	2	22
453	D-1	AH15	807	147	40.5	2	3	3	30
469	D-1	AH16	808	81	37	0	3	7	33
498	D-2	AH17	809	147	38.2	2	4	4	27
579	D-3	AH18	810	162	34.3	2	4	4	23
68	D-1	AH19	811	188	34.2	2	4	4	23
483	D-3	AH20	812	118	33.1	3	4	4	26
331	D-1	AH21	813	42	22	3	0	2	DEAD
87	D-3	AH22	814	81	24.5	0	3	3	25
416	D-2	AH23	815	138	30.4	2	3	3	25
495	D-3	AH24	816	DEAD	DEAD	DEAD	DEAD	DEAD	22
712	D-2	AI1	817	91	33.1	0	4	4	27
436	D-1	AI2	818	108	31	1	4	4	25
603	D-3	AI3	819	46	21	3	3	3	23

855	D-2	AI4	820	81	25	2	2	2	22
143	D-3	AI5	821	100	42.1	0	4	8	38
441	D-3	AI6	822	72	26	0	3	3	26
636	D-3	AI7	823	150	22	1	4	4	26
726	D-2	AI8	824	92	21.4	0	4	4	29
524	D-1	AI9	825	162	36	0	8	8	33
449	D-3	AI10	826	139	32	1	4	4	30
244	D-3	AI11	827	143	36	3	4	4	27
491	D-2	AI12	828	51	26	0	6	6	31
528	D-3	AI13	829	DEAD	DEAD	DEAD	DEAD	DEAD	22
623	D-1	AI14	830	161	31	2	4	4	25
429	D-1	AI15	831	200	37	0	4	4	27
720	D-1	AI16	832	26	9.8	3	0	0	22
860	D-3	AI17	833	DEAD	DEAD	DEAD	DEAD	DEAD	22
519	D-2	AI18	834	145	33	0	7	7	30
100	D-2	AI19	835	DEAD	DEAD	DEAD	DEAD	DEAD	25
338	D-3	AI20	836	135	27	2	2	2	24
130	D-2	AI21	837	84	32.1	0	3	3	24
648	D-1	AI22	838	69	13	3	2	2	22
43	D-2	AI23	839	121	35	0	6	6	31
647	D-1	AI24	840	87	19.8	1	2	2	23
863	D-3	AJ1	841	189	27	1	3	3	21
222	D-1	AJ2	842	131	32	3	3	3	23
863	D-1	AJ3	843	205	27.2	3	4	4	22
489	D-2	AJ4	844	94	39.4	2	2	2	22
663	D-1	AJ5	845	146	29.5	2	3	3	22
457	D-1	AJ6	846	162	28	1	4	4	24
159	D-3	AJ7	847	120	24	2	2	2	20
271	D-1	AJ8	848	92	32.5	2	3	7	NO
71	D-1	AJ9	849	113	23	2	3	3	24
235	D-1	AJ10	850	103	36.1	0	4	4	27
510	D-2	AJ11	851	189	39.5	2	5	5	29
703	D-1	AJ12	852	136	27	1	5	5	23

27	D-3	AJ13	853	141	39.2	1	4	4	26
592	D-1	AJ14	854	181	35	1	4	4	29
659	D-2	AJ15	855	222	38.9	2	4	4	28
519	D-1	AJ16	856	142	37	0	7	7	29
141	D-2	AJ17	857	175	31.5	2	5	5	26
447	D-3	AJ18	858	115	28.7	0	6	6	28
474	D-2	AJ19	859	165	29.8	2	3	3	23
133	D-3	AJ20	860	137	28.2	2	3	3	26
492	D-3	AJ21	861	151	36	1	4	4	24
106	D-3	AJ22	862	144	37	0	6	6	31
476	D-1	AJ23	863	146	33.1	1	3	3	26
164	D-1	AJ24	864	114	30.5	1	3	3	22
482	D-1	AK1	865	122	34.1	0	5	5	30
831	D-2	AK2	866	79	21.4	1	2	2	22
465	D-2	AK3	867	152	38.7	2	3	3	26
177	D-3	AK4	868	83	29	0	4	4	26
608	D-3	AK5	869	86	30.6	0	6	6	29
888	D-2	AK6	870	81	24	1	3	3	26
177	D-2	AK7	871	89	27	1	4	4	24
98	D-1	AK8	872	202	32	2	4	4	27
156	D-2	AK9	873	106	42.5	2	3	3	24
167	D-1	AK10	874	71	28	0	4	4	24
191	D-3	AK11	875	45	17.2	2	3	3	23
187	D-3	AK12	876	112	25	2	5	5	24
528	D-1	AK13	877	152	33.2	2	3	3	23
712	D-1	AK14	878	93	44	2	3	3	30
627	D-1	AK15	879	84	38.8	2	2	2	27
500	D-3	AK16	880	79	40	0	4	4	29
513	D-3	AK17	881	62	29	0	3	3	22
85	D-3	AK18	882	42	36	0	4	4	37
636	D-2	AK19	883	97	26	1	4	4	25
275	D-2	AK20	884	87	29	3	3	3	24
498	D-3	AK21	885	59	46	2	3	3	26

453	D-3	AK22	886	118	34.6	0	5	5	29
259	D-2	AK23	887	93	29.2	0	5	5	28
134	D-2	AK24	888	77	23	1	3	3	24
636	D-1	AL1	889	105	32	2	3	3	26
579	D-2	AL2	890	116	39	1	4	4	23
43	D-3	AL3	891	79	26	0	7	7	30
65	D-1	AL4	892	82	33	0	4	5	26
169	D-2	AL5	893	176	35.1	3	4	4	24
575	D-3	AL6	894	102	33	3	4	4	25
4	D-2	AL7	895	67	21.5	1	5	5	29
249	D-2	AL8	896	134	39	2	7	7	29
452	D-2	AL9	897	204	52	2	4	4	29
491	D-3	AL10	898	81	38	0	5	7	30
147	D-2	AL11	899	123	43.6	0	3	3	25
269	D-2	AL12	900	131	43	2	7	7	30
449	D-1	AL13	901	86	44	0	6	6	31
439	D-2	AL14	902	74	34.2	0	1	8	33
483	D-2	AL15	903	53	29	0	6	6	29
849	D-1	AL16	904	68	26	2	3	3	23
218	D-1	AL17	905	104	36	2	2	2	24
479	D-3	AL18	906	96	38	2	3	3	27
91	D-3	AL19	907	107	31.8	4	4	4	25
558	D-3	AL20	908	136	38	1	3	3	26
465	D-3	AL21	909	98	34	3	3	3	23
427	D-2	AL22	910	103	41	2	5	5	26
435	D-2	AL23	911	99	36.3	0	4	4	26
223	D-2	AL24	912	81	27	0	4	4	25
512	D-1	AM1	913	142	26.5	2	3	3	26
25	D-2	AM2	914	212	45.5	1	6	6	28
18	D-2	AM3	915	128	28.1	0	5	5	26
409	D-1	AM4	916	69	26	0	4	6	31
469	D-3	AM5	917	140	17	0	7	8	30
432	D-3	AM6	918	85	11	1	4	4	23

220	D-2	AM7	919	118	34	0	5	7	30
21	D-1	AM8	920	NO	NO	NO	NO	NO	NO
428	D-1	AM9	921	153	31.5	0	6	6	27
497	D-3	AM10	922	132	35	1	3	3	22
639	D-3	AM11	923	138	35.4	0	6	7	28
534	D-1	AM12	924	35	17	0	0	9	30
432	D-2	AM13	925	227	20	4	4	4	24
265	D-2	AM14	926	188	44.8	3	3	3	24
476	D-3	AM15	927	209	30.7	4	5	5	27
883	D-1	AM16	928	109	38	0	3	3	27
647	D-2	AM17	929	97	23	0	3	3	23
210	D-1	AM18	930	85	13.4	0	3	3	22
54	D-3	AM19	931	129	35.8	0	5	5	27
72	D-2	AM20	932	135	29	0	5	5	25
663	D-2	AM21	933	200	31.5	2	5	5	25
214	D-1	AM22	934	194	21.3	3	3	3	24
440	D-3	AM23	935	144	32	2	5	5	25
332	D-1	AM24	936	51	19	0	4	4	25
609	D-1	AN1	937	131	34	1	3	3	24
447	D-1	AN2	938	137	30	1	5	5	27
163	D-3	AN3	939	28	29.1	0	0	1	30
80	D-2	AN4	940	203	40	0	6	6	28
279	D-2	AN5	941	101	13	0	3	3	24
26	D-1	AN6	942	132	35	0	4	4	29
100	D-1	AN7	943	39	21	0	6	6	30
169	D-3	AN8	944	128	33	3	4	4	24
257	D-3	AN9	945	44	27	1	2	2	28
126	D-1	AN10	946	127	33	0	5	7	30
445	D-1	AN11	947	120	30.5	0	7	7	29
199	D-2	AN12	948	96	26	1	4	4	25
505	D-2	AN13	949	71	22.5	2	3	3	24
98	D-3	AN14	950	261	33	3	4	4	28
686	D-2	AN15	951	160	37	3	3	3	26

180	D-2	AN16	952	78	21.2	0	7	7	29
481	D-3	AN17	953	86	32.5	0	4	7	33
854	D-1	AN18	954	NO	NO	NO	NO	NO	23
411	D-2	AN19	955	71	36	0	3	6	33
104	D-2	AN20	956	83	9.8	2	2	2	22
451	D-3	AN21	957	169	30.8	2	5	5	24
480	D-1	AN22	958	140	24	0	4	4	24
94	D-2	AN23	959	126	30.1	0	4	4	28
116	D-3	AN24	960	107	25	0	4	4	28
448	D-2	AO1	961	156	32.6	3	4	4	27
1021	D-1	AO2	962	204	36.5	0	6	6	28
267	D-2	AO3	963	82	30.4	0	7	7	27
525	D-1	AO4	964	143	39	0	5	5	29
434	D-3	AO5	965	112	42	1	4	4	25
178	D-1	AO6	966	78	25	1	3	3	22
22	D-1	AO7	967	113	35	2	3	3	26
53	D-3	AO8	968	124	33	3	5	5	25
567	D-1	AO9	969	98	29	0	4	7	32
166	D-1	AO10	970	101	34	1	3	3	24
219	D-3	AO11	971	136	39.6	0	3	5	27
56	D-2	AO12	972	NO	NO	NO	NO	NO	NO
855	D-1	AO13	973	71	22	1	3	3	23
73	D-1	AO14	974	97	34	2	5	5	24
400	D-3	AO15	975	151	44.5	4	3	3	24
136	D-2	AO16	976	126	25.6	0	6	6	30
666	D-2	AO17	977	124	33	0	6	6	33
261	D-2	AO18	978	104	32	1	3	3	22
445	D-3	AO19	979	116	33	0	5	5	29
27	D-2	AO20	980	99	23.5	0	3	3	29
165	D-3	AO21	981	147	33.4	2	4	4	26
837	D-1	AO22	982	133	36.2	2	4	4	27
461	D-1	AO23	983	0	25.5	0	3	4	27
332	D-2	AO24	984	86	19	0	3	3	26

266	D-2	AP1	985	98	33.1	1	4	4	28
402	D-1	AP2	986	133	34	2	4	4	25
107	D-1	AP3	987	199	39	0	7	7	32
410	D-1	AP4	988	105	31	2	2	2	22
22	D-2	AP5	989	149	26	0	3	3	23
185	D-1	AP6	990	113	26	0	5	8	30
833	D-3	AP7	991	166	24	3	3	3	26
225	D-2	AP8	992	138	27	2	3	3	22
593	D-1	AP9	993	113	25	0	4	4	24
94	D-3	AP10	994	131	25.3	0	4	4	24
721	D-3	AP11	995	169	40	0	5	5	31
606	D-1	AP12	996	102	22	2	4	4	23
77	D-2	AP13	997	107	26.2	0	4	4	27
565	D-1	AP14	998	160	29.8	2	3	3	25
183	D-1	AP15	999	37	33.8	2	2	2	NO
190	D-3	AP16	1000	127	32.5	1	4	4	27
32	D-3	AP17	1001	80	12	1	2	2	26
435	D-3	AP18	1002	120	32	1	4	4	25
34	D-3	AP19	1003	227	32	1	7	7	27
1	D-3	AP20	1004	161	20	5	3	3	20
567	D-2	AP21	1005	139	36	0	5	5	31
199	D-1	AP22	1006	111	29	1	3	3	24
471	D-3	AP23	1007	127	31	3	5	5	29
469	D-2	AP24	1008	125	15	1	4	4	28
473	D-3	AQ1	1009	236	29	3	4	4	22
261	D-3	AQ2	1010	136	34	2	2	2	23
170	D-3	AQ3	1011	72	15.3	1	4	4	23
355	D-3	AQ4	1012	138	26	0	6	6	27
111	D-1	AQ5	1013	DEAD	DEAD	DEAD	DEAD	DEAD	23
823	D-3	AQ6	1014	239					24
141	D-3	AQ7	1015	126	26.6	0	6	8	25
626	D-2	AQ8	1016	167	30	3	4	4	27
455	D-2	AQ9	1017	111	42	1	4	4	29

237	D-3	AQ10	1018	138	22.7	0	4	4	26
651	D-3	AQ11	1019	82	20.9	0	4	4	24
348	D-3	AQ12	1020	121	33.4	1	5	5	30
180	D-3	AQ13	1021	66	43	1	4	4	29
477	D-1	AQ14	1022	157	39.5	0	5	5	27
505	D-3	AQ15	1023	107	20.3	1	3	3	22
52	D-2	AQ16	1024	98	24	0	3	3	23
658	D-3	AQ17	1025	144	34	0	5	9	33
500	D-2	AQ18	1026	85	28	1	5	5	30
722	D-1	AQ19	1027	DEAD	DEAD	DEAD	DEAD	DEAD	DEAD
547	D-2	AQ20	1028	119	27	0	3	3	24
620	D-1	AQ21	1029	84	37.2	0	3	3	29
254	D-2	AQ22	1030	102	26	3	3	3	23
736	D-3	AQ23	1031	114	31	0	6	7	31
163	D-1	AQ24	1032	50	41	0	2	3	30
136	D-1	AR1	1033	95	29.5	0	3	3	25
427	D-1	AR2	1034	67	30	0	4	4	25
465	D-1	AR3	1035	84	27	1	4	4	23
126	D-2	AR4	1036	37	19	0	4	4	30
259	D-1	AR5	1037	69	33	0	5	5	28
533	D-1	AR6	1038	45	22	0	2	2	23
485	D-1	AR7	1039	154	15.3	0	5	5	32
835	D-2	AR8	1040	119	34	0	5	5	25
347	D-2	AR9	1041	96	23	0	4	4	25
686	D-1	AR10	1042	DEAD	DEAD	DEAD	DEAD	DEAD	24
620	D-3	AR11	1043	62	31	0	3	3	31
52	D-3	AR12	1044	43	7	0	3	3	23
437	D-2	AR13	1045	76	26	1	4	4	25
267	D-3	AR14	1046	42	34	0	2	6	32
179	D-2	AR15	1047	78	23	2	3	3	21
336	D-2	AR16	1048	71	15	0	5	5	23
402	D-3	AR17	1049	49	24.4	0	4	4	24
416	D-1	AR18	1050	134	31.7	0	4	4	24

703	D-3	AR19	1051	142	26.8	3	4	4	27	
238	D-1	AR20	1052	DEAD	DEAD	DEAD	DEAD	DEAD	25	
408	D-2	AR21	1053	149	32.3	0	5	5	27	
214	D-2	AR22	1054	64	14.6	1	4	4	22	
551	D-2	AR23	1055	DEAD	DEAD	DEAD	DEAD	DEAD	DEAD	
666	D-1	AR24	1056	DEAD	DEAD	DEAD	DEAD	DEAD	DEAD	
109	D-2	AS1	1057	61	Top broken		1	2	2	25
58	D-2	AS2	1058	165	25.2	3	4	4	24	
17	D-1	AS3	1059	18	20	3	4	4	25	
607	D-1	AS4	1060	137	14	0	4	4	27	
29	D-1	AS5	1061	202	36	3	4	4	24	
228	D-1	AS6	1062	115	25	0	3	3	23	
639	D-1	AS7	1063	147	Top broken		3	1	0	24
59	D-1	AS8	1064	200	25.7	6	4	4	25	
177	D-1	AS9	1065	176	32	2	5	5	25	
712	D-3	AS10	1066	102	38.4	0	5	5	29	
415	D-1	AS11	1067	228	27	2	2	2	20	
541	D-2	AS12	1068	160	33.5	2	3	3	26	
191	D-1	AS13	1069	135	27	2	3	3	25	
687	D-1	AS14	1070	81	15.5	0	4	4	23	
860	D-2	AS15	1071	149	30.8	0	4	4	24	
198	D-3	AS16	1072	158	41	0	5	5	33	
573	D-2	AS17	1073	125	33.9	1	4	4	27	
239	D-1	AS18	1074	89	26.2	1	3	3	22	
495	D-1	AS19	1075	125	32	2	3	3	22	
860	D-1	AS20	1076	196	22.5	2	4	4	23	
615	D-2	AS21	1077	135	30.5	2	3	3	22	
46	D-3	AS22	1078	159	29	1	2	2	21	
158	D-3	AS23	1079	76	23	2	4	4	28	
258	D-2	AS24	1080	151	43	0	4	4	28	
732	D-1	AT1	1081	160	25	2	3	3	23	
530	D-2	AT2	1082	156	31.3	2	5	5	27	
849	D-2	AT3	1083	71	14	4	0	0	21	

365	D-3	AT4	1084	127	38.6	3	4	4	29
422	D-3	AT5	1085	125	21.1	2	2	2	21
42	D-3	AT6	1086	69	23	0	3	3	22
419	D-1	AT7	1087	163	28	2	6	6	30
128	D-2	AT8	1088	229	49	0	5	5	41
492	D-1	AT9	1089	130	33	1	3	3	25
270	D-3	AT10	1090	145	35	2	3	3	28
28	D-3	AT11	1091	223	18	2	3	3	23
444	D-2	AT12	1092	142	33.6	0	3	3	25
477	D-2	AT13	1093	155	34	0	5	5	27
77	D-1	AT14	1094	246	42	4	5	5	26
103	D-3	AT15	1095	197	39.4	1	6	6	30
424	D-3	AT16	1096	138	37	2	3	3	26
448	D-1	AT17	1097	271	36.2	4	3	3	26
170	D-1	AT18	1098	163	17	2	2	2	22
691	D-1	AT19	1099	219	38.5	2	4	4	26
408	D-1	AT20	1100	270	46	5	4	4	26
57	D-2	AT21	1101	147	32.5	1	5	5	26
1039	D-2	AT22	1102	149	26	0	4	4	24
26	D-2	AT23	1103	131	41	0	5	5	29
188	D-1	AT24	1104	246	24.5	2	4	4	23
104	D-3	AU1	1105	136	25	2	3	3	21
9	D-2	AU2	1106	NO	NO	NO	NO	NO	NO
65	D-3	AU3	1107	143	38.5	2	4	4	24
580	D-3	AU4	1108	66	33.2	1	4	4	24
558	D-2	AU5	1109	94	32.8	2	3	3	23
254	D-3	AU6	1110	41	22	2	2	2	22
510	D-1	AU7	1111	106	44	1	5	5	29
215	D-3	AU8	1112	52	17.5	3	3	3	24
835	D-3	AU9	1113	157	38.7	2	5	5	24
572	D-2	AU10	1114	124	34.5	0	7	7	30
265	D-3	AU11	1115	137	37.4	2	3	3	25
592	D-2	AU12	1116	149	37.5	0	5	5	31

73	D-3	AU13	1117	156	32.1	4	4	4	24
564	D-1	AU14	1118	184	47	2	2	2	26
560	D-1	AU15	1119	91	31.5	3	2	2	22
107	D-2	AU16	1120	161	39.1	0	6	8	31
77	D-3	AU17	1121	173	43	5	3	3	26
557	D-3	AU18	1122	102	30	5	2	2	24
569	D-2	AU19	1123	22	13	0	4	4	43
520	D-1	AU20	1124	69	33	0	5	5	22
664	D-3	AU21	1125	131	40.8	2	4	4	28
365	D-1	AU22	1126	142	40	2	4	4	27
530	D-1	AU23	1127	63	28	0	4	4	27
111	D-2	AU24	1128	64	20.2	1	4	4	26
24	D-1	AV1	1129	226	22.8	2	6	6	22
242	D-1	AV2	1130	148	38	2	5	5	25
290	D-2	AV3	1131	87	29.5	3	4	4	24
133	D-2	AV4	1132	140	21	1	7	7	29
25	D-3	AV5	1133	55	21	1	4	4	26
6	D-1	AV6	1134	268	40.3	0	6	6	33
525	D-2	AV7	1135	135	33	3	5	5	29
186	D-3	AV8	1136	133	34.1	2	2	2	27
179	D-3	AV9	1137	145	26	3	2	2	22
828	D-2	AV10	1138	139	34.8	0	6	7	29
554	D-2	AV11	1139	96	31.2	1	3	3	24
589	D-2	AV12	1140	113	26.1	0	5	5	23
264	D-3	AV13	1141	157	35.6	0	6	6	30
290	D-3	AV14	1142	162	34	3	3	3	25
573	D-1	AV15	1143	171	35	0	5	5	26
658	D-2	AV16	1144	145	44	0	5	6	32
450	D-1	AV17	1145	187	40.4	1	3	3	24
232	D-3	AV18	1146	108	32.5	1	3	3	25
593	D-2	AV19	1147	102	30.5	1	4	4	24
269	D-3	AV20	1148	136	36	2	4	4	27
553	D-3	AV21	1149	142	35	3	3	3	26

652	D-3	AV22	1150	129	32.8	2	3	3	26
91	D-1	AV23	1151	131	32	1	4	4	25
168	D-3	AV24	1152	146	27	1	4	4	26
1021	D-2	AW1	1153	165	38	0	7	7	27
363	D-2	AW2	1154	174	39	1	4	4	28
65	D-2	AW3	1155	180	37	2	3	3	25
17	D-3	AW4	1156	26	54.2	5	4	4	26
223	D-1	AW5	1157	121	34	3	5	5	26
501	D-2	AW6	1158	143	46.6	0	4	4	26
581	D-3	AW7	1159	181	38	0	8	8	30
525	D-3	AW8	1160	168	38	4	4	4	30
888	D-3	AW9	1161	152	31.2	2	3	3	25
29	D-2	AW10	1162	142	34	4	5	5	27
92	D-2	AW11	1163	245	39.5	4	3	3	26
451	D-2	AW12	1164	191	32	4	3	3	23
854	D-2	AW13	1165	162	34.3	3	2	2	24
338	D-1	AW14	1166	256	35	3	4	4	24
238	D-2	AW15	1167	155	32.1	3	3	3	26
697	D-2	AW16	1168	169	32	1	7	7	30
243	D-3	AW17	1169	199	30	3	6	6	26
506	D-2	AW18	1170	120	33.8	0	6	6	30
590	D-2	AW19	1171	49	16	0	4	4	26
175	D-3	AW20	1172	146	34.4	0	5	5	25
498	D-1	AW21	1173	120	44	2	3	3	27
48	D-2	AW22	1174	159	33.5	2	4	4	26
413	D-3	AW23	1175	282	20.5	2	4	4	24
442	D-2	AW24	1176	127	25.7	1	3	3	23
557	D-2	AX1	1177	151	33.8	5	3	3	23
494	D-2	AX2	1178	146	36	2	7	7	30
21	D-2	AX3	1179	NO	NO	NO	NO	NO	NO
481	D-1	AX4	1180	DEAD	DEAD	DEAD	DEAD	DEAD	NO
627	D-3	AX5	1181	168	37.2	2	4	4	26
486	D-1	AX6	1182	152	35	2	5	5	25

216	D-3	AX7	1183	136	27	2	4	4	25
230	D-1	AX8	1184	192	45	1	3	3	29
606	D-2	AX9	1185	146	35	1	5	5	24
341	D-2	AX10	1186	163	35	1	5	5	29
483	D-1	AX11	1187	152	36.6	3	4	4	28
661	D-2	AX12	1188	187	40	0	6	6	29
419	D-2	AX13	1189	181	38	4	3	3	27
89	D-2	AX14	1190	138	33.2	3	3	3	22
732	D-3	AX15	1191	126	32.5	2	4	4	25
569	D-3	AX16	1192	129	45	0	4	9	34
194	D-1	AX17	1193	129	36	3	4	4	25
413	D-1	AX18	1194	93	23	3	5	5	27
598	D-2	AX19	1195	DEAD	DEAD	DEAD	DEAD	DEAD	DEAD
78	D-3	AX20	1196	101	43	3	3	3	29
7	D-3	AX21	1197	63	30	1	3	3	25
145	D-2	AX22	1198	176	42.1	0	5	6	29
520	D-2	AX23	1199	114	32	1	5	5	21
505	D-1	AX24	1200	21	9	1	1	1	22
237	W-3	AY1	1201	158	44	3	3	3	21
140	W-1	AY2	1202	NO	NO	NO	NO	NO	NO
257	W-1	AY3	1203	82	32	2	3	3	24
91	W-1	AY4	1204	237	39	3	3	3	25
565	W-1	AY5	1205	235	33	3	3	3	23
167	W-3	AY6	1206	NO	NO	NO	NO	NO	NO
220	W-2	AY7	1207	189	39.2	2	5	5	28
420	W-2	AY8	1208	237	51	4	3	3	24
34	W-3	AY9	1209	264	51.2	3	5	5	26
837	W-2	AY10	1210	192	55.5	4	4	4	28
262	W-3	AY11	1211	179	58.5	4	4	4	26
72	W-3	AY12	1212	181	41.5	2	4	4	22
1032	W-1	AY13	1213	220	26	1	3	3	25
75	W-2	AY14	1214	348	43	3	6	6	38
665	W-2	AY15	1215	291	55.5	3	3	3	22

945	W-3	AY16	1216	269	42	2	3	3	22
156	W-2	AY17	1217	129	55	3	1	1	25
219	W-3	AY18	1218	151	54.5	2	3	3	29
442	W-1	AY19	1219	298	50.6	2	4	4	23
365	W-3	AY20	1220	104	46.2	2	3	3	27
176	W-2	AY21	1221	217	53.2	2	3	3	25
615	W-1	AY22	1222	311	43.5	3	3	3	21
835	W-2	AY23	1223	212	54	3	4	4	25
233	W-2	AY24	1224	216	47	2	3	3	22
720	W-3	AZ1	1225	319	40.5	5	3	3	25
688	W-1	AZ2	1226	NO	NO	NO	NO	NO	NO
92	W-1	AZ3	1227	267	32.3	6	3	3	34
17	W-1	AZ4	1228	527	71	3	3	3	29
177	W-2	AZ5	1229	79	33.5	0	2	2	25
455	W-3	AZ6	1230	195	44.5	2	2	2	24
279	W-1	AZ7	1231	190	19.8	3	3	3	22
199	W-3	AZ8	1232	175	43.3	3	4	4	26
437	W-3	AZ9	1233	207	46.8	3	2	2	26
712	W-3	AZ10	1234	NO	NO	NO	NO	NO	NO
186	W-3	AZ11	1235	209	44	3	4	4	25
24	W-1	AZ12	1236	402	33.1	3	4	4	20
260	W-2	AZ13	1237	117	33	0	3	3	23
131	W-1	AZ14	1238	103	45	4	9	9	37
425	W-1	AZ15	1239	338	49	5	3	3	24
593	W-2	AZ16	1240	216	48	5	6	6	27
259	W-3	AZ17	1241	131	51.5	1	5	5	28
34	W-1	AZ18	1242	289	43	1	9	9	29
32	W-1	AZ19	1243	356	25	5	4	4	24
42	W-1	AZ20	1244	287	46.8	4	3	3	23
230	W-3	AZ21	1245	181	41	2	5	5	28
28	W-3	AZ22	1246	229	28.7	3	2	2	21
47	W-1	AZ23	1247	238	42.5	3	2	2	22
573	W-3	AZ24	1248	222	46.6	3	4	4	26

212	W-3	BA1	1249	168	42	3	5	5	25
566	W-3	BA2	1250	253	40.5	5	2	2	22
572	W-2	BA3	1251	37	44	1	3	3	34
225	W-2	BA4	1252	150	31.2	5			22
168	W-1	BA5	1253	178	42.2	3	4	4	25
703	W-3	BA6	1254	210	36	4	3	3	21
162	W-2	BA7	1255	182	47.5	2	3	3	26
58	W-3	BA8	1256	267	39	5	3	3	24
457	W-1	BA9	1257	140	54.2	1	4	4	26
849	W-2	BA10	1258	175	42.5	3	3	3	22
194	W-2	BA11	1259	164	45.4	4	3	3	23
89	W-3	BA12	1260	206	41.2	2	3	3	21
43	W-3	BA13	1261	210	47	1	5	5	28
178	W-3	BA14	1262	198	43	2	3	3	19
71	W-2	BA15	1263	107	24	1	4	4	22
464	W-3	BA16	1264	238	50.5	4	2	2	22
220	W-3	BA17	1265	166	40.8	2	5	5	28
623	W-2	BA18	1266	238	42.5	3	3	3	23
84	W-2	BA19	1267	244	28	3	4	4	23
136	W-2	BA20	1268	233	44	5	4	4	29
639	W-3	BA21	1269	199	52	3	4	4	28
1	W-1	BA22	1270	266	43.6	5	3	3	21
260	W-3	BA23	1271	159	42	1	4	4	20
560	W-3	BA24	1272	294	39	3	3	3	20
163	W-1	BB1	1273	99	50	1	2	2	28
290	W-1	BB2	1274	263	43	4	2	2	26
557	W-1	BB3	1275	432	38	7	4	4	28
365	W-1	BB4	1276	257	53.4	4	3	3	26
18	W-1	BB5	1277	303	50.2	3	3	3	21
44	W-2	BB6	1278	240	52	2	3	3	24
429	W-3	BB7	1279	272	43.1	3	4	4	26
452	W-2	BB8	1280	183	46	2	6	6	32
167	W-1	BB9	1281	83	NO	NO	NO	NO	NO

76	W-1	BB10	1282	170	46	3	3	3	26	
435	W-1	BB11	1283	249	52	2	2	2	27	
218	W-2	BB12	1284	160	42.6	5	2	2	31	
707	W-3	BB13	1285	242	50	2	4	4	31	
77	W-3	BB14	1286	250	51	4	4	4	28	
639	W-1	BB15	1287	312	61	3	3	3	26	
581	W-3	BB16	1288	264	48.5	0	7	7	33	
422	W-3	BB17	1289	263	44	2	3	3	23	
651	W-2	BB18	1290	252	46.5	4	3	3	25	
446	W-3	BB19	1291	148	41	2	5	5	30	
89	W-2	BB20	1292	256	41	2	2	2	21	
44	W-1	BB21	1293	298	56	3	3	3	23	
402	W-3	BB22	1294	244	57.6	4	2	2	25	
336	W-2	BB23	1295	261	35	3	4	4	22	
222	W-3	BB24	1296	215	42	1	4	4	25	
685	W-3	BC1	1297	347	51.1	5	3	3	25	
424	W-2	BC2	1298	183	47.3	0	4	4	27	
228	W-1	BC3	1299	210	45	4	3	3	24	
141	W-1	BC4	1300	252	43	3	4	4	26	
598	W-2	BC5	1301	156	47.4	0	4	4	27	
300	W-1	BC6	1302	191	35	3	3	3	22	
164	W-1	BC7	1303	185	45	1	2	4	23	
831	W-3	BC8	1304	247	48	5	3	3	26	
232	W-2	BC9	1305	205	46.8	2	4	4	25	
87	W-2	BC10	1306	167	52	1	4	4	26	
661	W-1	BC11	1307	205	27	2	4	4	25	
654	W-3	BC12	1308	214	62.8	0	7	7	32	
354	W-2	BC13	1309	292	44	6	6	6	28	
581	W-1	BC14	1310	310	47.4	2	6	6	29	
197	W-1	BC15	1311	203	25	3	4	4	24	
806	W-3	BC16	1312	266	47.5	3	5	5	24	
44	W-3	BC17	1313	106	42	0	3	3	24	
24	W-2	BC18	1314	350	33.4	4	4	4	20	

440	W-2	BC19	1315	263	56	4	4	4	24
663	W-3	BC20	1316	219	52	2	3	3	22
176	W-1	BC21	1317	182	51	0	4	4	25
602	W-3	BC22	1318	166	47.5	3	3	3	23
575	W-2	BC23	1319	206	47	2	3	3	25
860	W-3	BC24	1320	281	47.8	4	3	5	27
482	W-2	BD1	1321	215	53	4	5	5	32
222	W-1	BD2	1322	207	40	4	3	3	22
400	W-1	BD3	1323	196	33	11	2	2	23
513	W-2	BD4	1324	178	44.5	2	3	3	22
608	W-3	BD5	1325	213	54.5	4	4	4	27
497	W-3	BD6	1326	127	47	3	4	4	21
596	W-3	BD7	1327	171	42	4	3	3	29
219	W-2	BD8	1328	128	56	1	4	4	27
420	W-3	BD9	1329	228	47.5	2	2	2	25
603	W-2	BD10	1330	170	48	3	3	3	22
72	W-2	BD11	1331	133	40	3	2	2	26
555	W-2	BD12	1332	197	44	2	4	4	22
140	W-3	BD13	1333	152	46.3	4	3	3	29
448	W-1	BD14	1334	253	45.9	4	3	3	26
179	W-2	BD15	1335	309	41	3	3	3	20
244	W-1	BD16	1336	167	49	3	3	3	23
175	W-1	BD17	1337	215	46	2	3	3	23
232	W-3	BD18	1338	136	43	2	3	3	24
244	W-3	BD19	1339	149	50	3	3	3	23
7	W-3	BD20	1340	54	39	0	2	2	28
945	W-1	BD21	1341	236	43	4	6	6	23
427	W-3	BD22	1342	161	56.1	3	3	3	25
448	W-3	BD23	1343	216	44.4	3	3	3	26
107	W-1	BD24	1344	178	53.2	0	5	5	30
503	W-2	BE1	1345	125	48.2	2	2	2	27
1033	W-1	BE2	1346	284	51.5	4	3	3	24
59	W-2	BE3	1347	205	50	3	2	2	23

254	W-3	BE4	1348	312	39.6	6	3	3	20	
273	W-1	BE5	1349	86	41	1	4	4	24	
534	W-2	BE6	1350	128	54	0	6	6	28	
592	W-2	BE7	1351	219	40.2	3	4	4	28	
261	W-2	BE8	1352	208	51	3	4	4	23	
732	W-3	BE9	1353	221	40.5	4	3	3	28	
1021	W-3	BE10	1354	244	49.9	1	5	5	24	
721	W-1	BE11	1355	183	46	1	4	4	27	
104	W-1	BE12	1356	317	46.3	3	3	3	21	
709	W-1	BE13	1357	201	49	3	4	4	25	
272	W-2	BE14	1358	214	51	3	3	3	25	
496	W-1	BE15	1359	100	27	4	6	6	31	
524	W-2	BE16	1360	176	47.2	0	4	4	32	
665	W-1	BE17	1361	242	51	3	2	2	21	
290	W-2	BE18	1362	208	50.3	4	3	3	21	
413	W-3	BE19	1363	159	28.7	4	3	3	26	
483	W-1	BE20	1364	171	41	4	3	3	24	
261	W-1	BE21	1365	82	37.4	2	3	3	25	
140	W-2	BE22	1366	198	54	4	3	3	26	
519	W-3	BE23	1367	207	50.6	3	6	6	27	
738	W-3	BE24	1368	142	47.5	0	5	5	26	
1033	W-2	BF1	1369	195	50.6	4	3	3	26	
703	W-2	BF2	1370	223	36	6	2	2	22	
246	W-1	BF3	1371	85					30	
286	W-1	BF4	1372	156	54.3	2	2	2	23	
437	W-2	BF5	1373	141	42	3	3	3	26	
425	W-2	BF6	1374	198	42	4	2	2	24	
218	W-1	BF7	1375	213	46.1	3	2	2	22	
302	W-3	BF8	1376	189					35	
648	W-3	BF9	1377	135	43	1	3	3	26	
249	W-3	BF10	1378	174	48.5	1	6	6	28	
541	W-2	BF11	1379	166	31.5	3	4	4	27	
727	W-1	BF12	1380	206	52	3	6	6	23	

563	W-2	BF13	1381	120	42	1	5	5	29	
535	W-3	BF14	1382	109	51.3	0	5	6	36	
114	W-1	BF15	1383	201	50	2	4	4	25	
218	W-3	BF16	1384	190	45.2	2	3	3	22	
590	W-1	BF17	1385	265	24	2	4	4	22	
198	W-1	BF18	1386	64	39	0	6	7	34	
300	W-2	BF19	1387	216	41	3	2	2	21	
165	W-3	BF20	1388	111	39	3	3	3	25	
444	W-2	BF21	1389	196	45.4	3	3	3	27	
400	W-3	BF22	1390	42	24	0	3	3	25	
590	W-3	BF23	1391	257	24.3	1	6	6	22	
71	W-3	BF24	1392	143	26	2	2	2	24	
165	W-1	BG1	1393	256	44.5	5	3	3	25	
136	W-3	BG2	1394	435	39.7	6	6	6	29	
428	W-1	BG3	1395	362	49.5	3	5	5	24	
719	W-1	BG4	1396	296	25	3	4	4	24	
414	W-2	BG5	1397	125	19	0	7	8	31	
602	W-1	BG6	1398	208	49.9	3	3	3	24	
525	W-3	BG7	1399	117	27	4	5	8	35	
427	W-2	BG8	1400	274	50.5	3	3	3	23	
197	W-3	BG9	1401	208	21	1	3	3	29	
264	W-2	BG10	1402	125	49	1	5	5	31	
155	W-2	BG11	1403	377	50.5	4	2	2	23	
199	W-1	BG12	1404	178	43.1	3	3	3	27	
354	W-1	BG13	1405	276	40	4	8	8	30	
473	W-3	BG14	1406	366	46	3	3	3	22	
497	W-1	BG15	1407	414	44	4	2	2	27	
158	W-2	BG16	1408	193	44	4	3	3	29	
71	W-1	BG17	1409	83	25.1	1	2	2	22	
281	W-1	BG18	1410	246	43.6	2	4	4	24	
506	W-3	BG19	1411	315	53	5	3	3	27	
523	W-2	BG20	1412	274	55	4	4	4	25	
165	W-2	BG21	1413	164	47.5	5	2	2	25	

1039	W-1	BG22	1414	243	53	2	4	4	26	
508	W-3	BG23	1415	171	59.1	1	6	6	26	
628	W-1	BG24	1416	122	27.5	5	3	3	25	
472	W-3	BH1	1417	251	25	3	3	3	22	
641	W-2	BH2	1418	237	41	3	6	6	30	
185	W-3	BH3	1419	84	47	0	6	6	30	
697	W-2	BH4	1420	161	47	1	4	4	29	
76	W-3	BH5	1421	102	42.5	3	2	2	26	
212	W-2	BH6	1422	167	38	3	5	5	25	
651	W-3	BH7	1423	169	44.3	3	2	2	25	
275	W-1	BH8	1424	168	33	3	3	3	32	
611	W-2	BH9	1425	264	40	3	6	6	28	
252	W-3	BH10	1426	168	56	4	3	3	22	
596	W-2	BH11	1427	195	41	4	6	6	30	
155	W-3	BH12	1428	256	49	3	4	4	25	
505	W-2	BH13	1429	234	45	3	3	3	25	
498	W-3	BH14	1430	246	52	3	3	3	27	
429	W-1	BH15	1431	273	51	3	4	4	25	
479	W-3	BH16	1432	175	59.5	3	2	2	25	
1	W-2	BH17	1433	216	39	5	3	3	22	
133	W-3	BH18	1434	234	26	3	5	5	31	
504	W-3	BH19	1435	232	46.5	4	3	3	25	
600	W-3	BH20	1436	187	54	2	3	3	26	
452	W-1	BH21	1437	195	45.5	6	3	3	36	
178	W-2	BH22	1438	139	52	2	3	3	24	
658	W-2	BH23	1439	196	51	0	6	6	32	
341	W-2	BH24	1440	158	35.5	2	2	3	35	
449	W-2	BI1	1441	351	56	5	3	3	29	
432	W-3	BI2	1442	204	32.5	4	3	3	24	
534	W-3	BI3	1443	198	60.5	0	6	6	30	
32	W-3	BI4	1444	176	28	4	5	5	27	
25	W-2	BI5	1445	238	55.1	0	4	4	29	
260	W-1	BI6	1446	207	41	2	5	5	20	

55	W-2	BI7	1447	211	27	2	3	3	26
43	W-1	BI8	1448	244	55	2	3	3	28
444	W-1	BI9	1449	241	15	1	0	0	27
623	W-3	BI10	1450	212	47.3	3	4	4	24
279	W-3	BI11	1451	147	21.5	2	2	2	24
415	W-1	BI12	1452	263	44	4	3	3	22
600	W-1	BI13	1453	197	47	2	3	3	23
500	W-3	BI14	1454	157	55.5	2	4	4	31
281	W-3	BI15	1455	305	48	3	2	2	21
572	W-3	BI16	1456	262	55	2	6	6	32
54	W-2	BI17	1457	NO	NO	NO	NO	NO	NO
235	W-3	BI18	1458	169	44	3	4	4	27
554	W-2	BI19	1459	204	38	2	3	3	27
180	W-2	BI20	1460	156	50	0	5	5	32
188	W-1	BI21	1461	165	55	4	4	4	23
492	W-2	BI22	1462	182	49	3	4	4	25
249	W-1	BI23	1463	108	43.5	0	5	5	26
163	W-2	BI24	1464	62	50	0	3	3	30
270	W-1	BJ1	1465	107	45.5	1	2	2	25
400	W-2	BJ2	1466	143	23	12	3	3	23
855	W-2	BJ3	1467	97	31.5	2	2	2	24
491	W-1	BJ4	1468	182	40	3	6	6	26
49	W-3	BJ5	1469	179	41.5	0	7	7	28
331	W-3	BJ6	1470	166	47	4	5	5	25
648	W-1	BJ7	1471	96	43	3	3	3	22
498	W-1	BJ8	1472	264	49	3	3	3	27
348	W-3	BJ9	1473	188	44	2	5	5	25
278	W-2	BJ10	1474	223	44.9	4	3	3	28
160	W-2	BJ11	1475	194	40.3	3	4	4	26
594	W-1	BJ12	1476	183	40.2	3	3	3	26
511	W-2	BJ13	1477	176	48.5	4	5	5	25
533	W-3	BJ14	1478	152	52.5	1	5	5	28
27	W-3	BJ15	1479	348	54	4	4	4	26

301	W-3	BJ16	1480	171	43	1	5	5	28
603	W-3	BJ17	1481	188	52	0	5	5	29
258	W-2	BJ18	1482	124	31	0	4	4	26
162	W-1	BJ19	1483	151	51	3	4	4	24
136	W-1	BJ20	1484	192	47	4	5	5	27
170	W-3	BJ21	1485	183	33.2	4	3	3	22
503	W-1	BJ22	1486	134	49	1	2	2	27
591	W-2	BJ23	1487	220	47.4	5	3	3	24
594	W-2	BJ24	1488	159	43	2	3	3	27
627	W-1	BK1	1489	186	49	3	4	4	26
563	W-3	BK2	1490	145	39.5	4	3	3	27
575	W-1	BK3	1491	242	45	5	3	3	23
275	W-2	BK4	1492	133	43.1	3	2	2	20
665	W-3	BK5	1493	266	51	5	2	2	21
204	W-1	BK6	1494	63	37	1	3	3	25
555	W-1	BK7	1495	271	49	3	3	3	24
134	W-3	BK8	1496	216	40	4	4	4	22
163	W-3	BK9	1497	114	57	0	4	4	26
147	W-2	BK10	1498	202	47	3	4	4	25
257	W-2	BK11	1499	79	39	2	4	4	30
59	W-3	BK12	1500	175	46.8	2	4	4	25
302	W-2	BK13	1501	95	47.2	1	5	5	31
510	W-1	BK14	1502	173	54	1	6	6	29
474	W-2	BK15	1503	315	54	5	3	3	23
863	W-2	BK16	1504	244	47	3	3	3	23
190	W-1	BK17	1505	67	NO	NO	NO	NO	NO
697	W-1	BK18	1506	258	48	0	8	8	30
103	W-3	BK19	1507	85	33	2	6	6	28
2	W-2	BK20	1508	217	56.5	3	3	3	29
415	W-3	BK21	1509	226	42	3	3	3	23
104	W-3	BK22	1510	208	50.5	3	2	2	29
589	W-3	BK23	1511	162	53	4	4	4	23
85	W-3	BK24	1512	10	19	1	8	8	35

109	W-3	BL1	1513	238	56.5	3	4	4	26	
722	W-2	BL2	1514	249	59	2	3	3	26	
416	W-3	BL3	1515	186	46.8	4	4	4	25	
653	W-1	BL4	1516	187	55	3	3	3	28	
476	W-1	BL5	1517	113	39	3	2	2	28	
451	W-3	BL6	1518	210	43	4	4	4	24	
210	W-1	BL7	1519	208	28.1	3	3	3	22	
225	W-3	BL8	1520	227	46	5	3	3	23	
264	W-3	BL9	1521	301	47	2	6	6	29	
596	W-1	BL10	1522	63	35	2	2	2	26	
243	W-3	BL11	1523	266	49.5	3	5	5	27	
238	W-1	BL12	1524	181	48	3	3	3	26	
67	W-1	BL13	1525	188	41.5	3	3	3	22	
10	W-2	BL14	1526	149	57	4	2	5	33	
137	W-1	BL15	1527	242	52.1	1	5	5	29	
451	W-1	BL16	1528	258	48	3	4	4	23	
242	W-3	BL17	1529	191	60	1	5	5	27	
860	W-2	BL18	1530	232	53	2	3	3	25	
647	W-2	BL19	1531	286	46.5	4	4	4	22	
9	W-1	BL20	1532	157	50.8	2	4	4	25	
463	W-2	BL21	1533	269	53.5	2	6	6	31	
96	W-1	BL22	1534	162	Top broken		5	4	4	26
497	W-2	BL23	1535	278	45	3	3	3	22	
628	W-3	BL24	1536	160	34	4	3	3	24	
553	W-3	BM1	1537	207	43	4	3	3	26	
620	W-3	BM2	1538	147	47	2	2	2	27	
594	W-3	BM3	1539	168	44	5	3	3	27	
258	W-3	BM4	1540	4	31	3	0	0	26	
106	W-1	BM5	1541	156	37	2	4	4	29	
459	W-3	BM6	1542	181	50	1	5	5	28	
640	W-2	BM7	1543	214	44	3	3	3	21	
481	W-3	BM8	1544	309	51.5	3	5	5	33	
519	W-1	BM9	1545	263	47	3	4	4	30	

91	W-2	BM10	1546	227	45	1	5	5	25
442	W-3	BM11	1547	215	48	1	3	3	21
94	W-2	BM12	1548	297	51.5	3	5	5	24
672	W-2	BM13	1549	191	52.6	2	3	3	29
265	W-1	BM14	1550	193	49.5	3	3	3	26
440	W-1	BM15	1551	214	57	2	4	4	24
10	W-1	BM16	1552	126	NO	NO	NO	NO	NO
30	W-3	BM17	1553	201	47.4	3	4	4	22
662	W-1	BM18	1554	162	36.3	3	7	7	30
652	W-2	BM19	1555	211	43.5	4	3	3	25
271	W-1	BM20	1556	92	29.9	2	5	5	29
2	W-3	BM21	1557	205	45	3	3	3	27
727	W-3	BM22	1558	123	51.5	2	6	6	25
73	W-1	BM23	1559	128	36	2	4	4	22
198	W-2	BM24	1560	158	9	10	3	3	33
29	W-1	BN1	1561	297	46.5	6	3	3	24
107	W-3	BN2	1562	220	48.6	3	5	5	31
476	W-3	BN3	1563	148	38	6	3	3	25
347	W-2	BN4	1564	327	30.8	7	4	6	28
551	W-1	BN5	1565	295	48	3	4	4	27
6	W-3	BN6	1566	310	48.5	2	5	5	28
727	W-2	BN7	1567	243	54.9	4	5	5	24
726	W-1	BN8	1568	261	35.5	3	3	3	25
483	W-2	BN9	1569	249	50	4	3	3	30
450	W-2	BN10	1570	183	50	3	3	3	22
685	W-2	BN11	1571	226	46.3	4	2	2	20
495	W-3	BN12	1572	251	52.3	1	4	4	25
118	W-3	BN13	1573	275	48	3	3	3	26
121	W-1	BN14	1574	277	55	3	5	5	27
567	W-2	BN15	1575	278	45.6	4	5	5	37
486	W-1	BN16	1576	286	58	2	5	5	26
462	W-3	BN17	1577	291	47	3	4	4	24
160	W-1	BN18	1578	272	44	3	4	4	25

115	W-2	BN19	1579	293	46.1	3	3	3	20	
610	W-2	BN20	1580	241	44	4	3	3	22	
97	W-3	BN21	1581	199	46	4	5	5	21	
55	W-1	BN22	1582	187	25	1	2	2	21	
592	W-3	BN23	1583	264	41	4	5	5	28	
888	W-3	BN24	1584	176	48	4	4	4	23	
348	W-2	BO1	1585	232	40	3	6	6	25	
195	W-3	BO2	1586	181	38.5	1	5	5	27	
883	W-3	BO3	1587	194	43	2	4	4	26	
828	W-1	BO4	1588	101	30	0	6	6	27	
501	W-1	BO5	1589	214	42	0	4	4	29	
175	W-3	BO6	1590	194	43	3	3	3	23	
558	W-2	BO7	1591	NO	NO	NO	NO	NO	NO	
38	W-2	BO8	1592	235	45	4	4	4	24	
195	W-2	BO9	1593	169	47	5	4	4	28	
691	W-3	BO10	1594	257	62	4	4	4	22	
481	W-2	BO11	1595	228	54.5	0	7	7	33	
244	W-2	BO12	1596	161	42	3	4	4	22	
855	W-1	BO13	1597	212	43	3	2	2	20	
467	W-2	BO14	1598	294	43.5	4	4	4	23	
567	W-1	BO15	1599	254	48	2	4	6	33	
504	W-1	BO16	1600	255	47	3	3	3	23	
24	W-3	BO17	1601	347	33.3	3	4	4	21	
590	W-2	BO18	1602	168	16	2	5	5	23	
510	W-3	BO19	1603	171	51	1	4	4	29	
134	W-1	BO20	1604	284	41	4	3	3	21	
593	W-3	BO21	1605	250	46.5	5	3	3	21	
302	W-1	BO22	1606	208	54	0	6	7	32	
185	W-1	BO23	1607	103	44	0	6	6	30	
627	W-2	BO24	1608	126	46	1	3	3	29	
471	W-2	BP1	1609	289					31	
648	W-2	BP2	1610	178	46.2	3	3	3	25	
416	W-1	BP3	1611	193	51	3	3	3	22	

520	W-1	BP4	1612	179	51	2	5	5	23	
228	W-3	BP5	1613	145	45.5	2	4	4	25	
170	W-2	BP6	1614	213	33.7	4	3	3	22	
47	W-2	BP7	1615	311	54.1	3	3	3	24	
513	W-3	BP8	1616	285	56.3	2	3	3	23	
428	W-2	BP9	1617	271	53	4	6	6	26	
625	W-3	BP10	1618	124	28.5	3	4	4	27	
654	W-2	BP11	1619	229	63	0	8	8	33	
828	W-3	BP12	1620	331	61	3	7	7	28	
21	W-2	BP13	1621	234	51.5	2	5	5	29	
160	W-3	BP14	1622	293	48.3	3	3	3	26	
543	W-1	BP15	1623	213	52	3	4	4	32	
128	W-2	BP16	1624	214	46.5	0	5	5	35	
983	W-1	BP17	1625	297	46	4	4	4	24	
445	W-2	BP18	1626	267	55	0	7	7	29	
182	W-1	BP19	1627	248	56.5	2	4	4	26	
685	W-1	BP20	1628	260	54.2	1	3	3	26	
259	W-1	BP21	1629	122	51.2	1	5	5	28	
3	W-2	BP22	1630	236	53.4	2	5	5	29	
663	W-1	BP23	1631	276	58.5	2	4	4	23	
675	W-3	BP24	1632	262	62.5	4	5	5	24	
217	W-2	BQ1	1633	174	45	4	4	4	21	
68	W-3	BQ2	1634	268	56	3	5	5	23	
658	W-1	BQ3	1635	193	53.2	0	6	6	32	
237	W-2	BQ4	1636	146	46	1	4	4	25	
463	W-3	BQ5	1637	182	56.2	2	5	5	27	
169	W-1	BQ6	1638	196	38	4	3	3	21	
651	W-1	BQ7	1639	165	46	3	3	3	25	
722	W-1	BQ8	1640	172	67	4	2	2	27	
562	W-3	BQ9	1641	324	48.2	4	5	5	22	
4	W-3	BQ10	1642	203	50	4	3	3	26	
214	W-1	BQ11	1643	248	39	4	4	4	21	
534	W-1	BQ12	1644	256	63.5	0	7	7	29	

420	W-1	BQ13	1645	127	47.3	3	2	2	26	
179	W-1	BQ14	1646	372	36	4	2	2	24	
1028	W-2	BQ15	1647	214	32	4	4	4	26	
116	W-3	BQ16	1648	174	54	1	4	4	26	
659	W-3	BQ17	1649	216	44	0	6	6	29	
523	W-1	BQ18	1650	138	56.2	2	4	4	24	
445	W-1	BQ19	1651	157	53	2	4	4	28	
109	W-1	BQ20	1652	217	45	2	3	3	24	
489	W-3	BQ21	1653	172	46	3	3	3	21	
606	W-2	BQ22	1654	189	42	4	3	3	21	
261	W-3	BQ23	1655	193	52	2	4	4	21	
626	W-1	BQ24	1656	158	50.5	2	3	3	27	
463	W-1	BR1	1657	315	55	4	6	6	28	
168	W-2	BR2	1658	NO	NO	NO	NO	NO	NO	
434	W-1	BR3	1659	257	59	2	6	6	28	
65	W-3	BR4	1660	176	48	3	5	5	25	
579	W-2	BR5	1661	251	42	3	6	6	20	
358	W-2	BR6	1662	198	46	4	3	3	22	
425	W-3	BR7	1663	281	49.5	5	4	4	25	
185	W-2	BR8	1664	43	33.5	4	8	8	27	
7	W-2	BR9	1665	45	43	1	1	1	27	
441	W-1	BR10	1666	208					27	
203	W-3	BR11	1667	223	46.2	3	5	5	23	
187	W-1	BR12	1668	206	48	3	7	7	26	
175	W-2	BR13	1669	256	44.4	2	6	6	24	
78	W-2	BR14	1670	147	48	2	3	3	32	
535	W-2	BR15	1671	204	68	1	3	4	38	
164	W-3	BR16	1672	170	48.2	3	3	3	25	
80	W-3	BR17	1673	184	51	0	5	5	29	
662	W-3	BR18	1674	241					33	
1021	W-2	BR19	1675	248	45	2	8	8	27	
18	W-3	BR20	1676	232	52	5	5	5	26	
239	W-2	BR21	1677	141	37	3	3	3	22	

720	W-1	BR22	1678	314	40	5	6	6	22
78	W-1	BR23	1679	149	40.2	3	4	4	27
726	W-2	BR24	1680	129	34.2	1	4	4	26
504	W-2	BS1	1681	293	49	4	3	3	25
453	W-1	BS2	1682	202	29.5	2	5	5	31
447	W-2	BS3	1683	252	48	5	4	4	24
145	W-3	BS4	1684	271	57.8	4	6	6	28
233	W-1	BS5	1685	246	49	3	3	3	21
220	W-1	BS6	1686	177	40	1	4	4	27
169	W-3	BS7	1687	291	46	4	4	4	24
553	W-2	BS8	1688	298	53	4	4	4	27
265	W-3	BS9	1689	214	43.4	2	3	3	22
435	W-3	BS10	1690	169	48.1	3	4	4	27
204	W-3	BS11	1691	213	43	2	5	5	27
1033	W-3	BS12	1692	274	51	5	4	4	23
332	W-2	BS13	1693	168	47	2	3	3	27
623	W-1	BS14	1694	238	43.4	3	3	3	23
462	W-1	BS15	1695	372	50.5	4	3	3	25
707	W-1	BS16	1696	232	52	0	7	7	30
116	W-1	BS17	1697	288	56.1	2	4	4	27
252	W-2	BS18	1698	224	57	3	3	3	25
580	W-2	BS19	1699	283	57	5	4	4	24
495	W-2	BS20	1700	213	54.5	3	4	4	25
436	W-1	BS21	1701	260	54.3	4	5	5	26
25	W-1	BS22	1702	194	59	0	4	4	27
883	W-1	BS23	1703	214	55.8	2	4	4	23
126	W-2	BS24	1704	186	51	1	5	5	28
533	W-1	BT1	1705	187	46.5	5	2	2	26
143	W-1	BT2	1706	236	44.6	0	8	8	33
80	W-2	BT3	1707	234	50	2	6	6	29
855	W-3	BT4	1708	244	41	3	4	4	21
348	W-1	BT5	1709	142	39	1	6	6	28
547	W-3	BT6	1710	229	52.5	2	3	3	24

485	W-2	BT7	1711	213	26.4	3	3	3	26
697	W-3	BT8	1712	307	46.3	4	7	7	30
75	W-3	BT9	1713	308	46.2	2	6	6	27
640	W-3	BT10	1714	168	47.5	2	3	3	23
214	W-3	BT11	1715	273	29	4	4	4	22
41	W-3	BT12	1716	251	51	4	2	2	23
85	W-2	BT13	1717	51	57	0	4	8	42
3	W-1	BT14	1718	275	50.3	1	5	5	29
187	W-3	BT15	1719	267	45.2	4	6	6	25
647	W-3	BT16	1720	203	40	3	3	3	21
467	W-3	BT17	1721	165	46	3	4	4	25
100	W-1	BT18	1722	194	53	5	2	2	26
686	W-2	BT19	1723	215	39.8	4	3	3	24
25	W-3	BT20	1724	244	58	0	5	5	26
96	W-2	BT21	1725	138	48.8	5	3	3	26
712	W-2	BT22	1726	197	53.8	2	3	3	29
115	W-3	BT23	1727	197	42.5	4	3	3	21
460	W-3	BT24	1728	99	47	2	3	3	28
564	W-1	BU1	1729	157	50	0	3	7	29
129	W-3	BU2	1730	187	51	3	3	3	24
233	W-3	BU3	1731	130	43.5	1	3	3	24
606	W-3	BU4	1732	138	39	3	4	4	24
363	W-2	BU5	1733	105	40.5	1	4	4	27
496	W-2	BU6	1734	112	42	1	8	8	29
469	W-2	BU7	1735	262	23	3	7	7	29
411	W-2	BU8	1736	150	48.5	0	8	8	31
453	W-2	BU9	1737	199	49	0	5	5	29
524	W-3	BU10	1738	252	49.1	0	6	6	32
408	W-2	BU11	1739	191	53	1	5	5	27
506	W-2	BU12	1740	227	56	0	4	4	26
480	W-1	BU13	1741	264	46.3	4	3	3	21
854	W-3	BU14	1742	243	51.5	3	3	3	21
332	W-3	BU15	1743	221	50.1	2	2	2	26

125	W-3	BU16	1744	171	53	1	4	4	29
598	W-3	BU17	1745	143	48.8	0	4	4	30
78	W-3	BU18	1746	138	49	1	5	5	30
480	W-3	BU19	1747	215	43	4	3	3	21
434	W-3	BU20	1748	175	53.5	2	3	3	24
572	W-1	BU21	1749	228	56.2	1	5	5	29
246	W-2	BU22	1750	70	45	0	5	5	28
688	W-2	BU23	1751	201	35	2	4	4	21
636	W-1	BU24	1752	205	24	2	3	3	25
214	W-2	BV1	1753	113	28	3	4	4	21
703	W-1	BV2	1754	215	42	5	5	5	25
12	W-2	BV3	1755	225	49.5	3	3	3	25
494	W-2	BV4	1756	187		1	5	5	33
837	W-1	BV5	1757	180	45	2	5	5	25
480	W-2	BV6	1758	286	38	4	3	3	21
301	W-2	BV7	1759	117	46.2	2	2	2	27
721	W-3	BV8	1760	298	48.7	3	4	4	27
197	W-2	BV9	1761	219	23.5	1	4	4	28
77	W-2	BV10	1762	160	48	2	4	4	26
551	W-3	BV11	1763	286	41	1	5	5	29
103	W-2	BV12	1764	166	37.4	0	4	4	27
203	W-2	BV13	1765	281	51	2	5	5	22
983	W-3	BV14	1766	243	41.3	3	3	3	24
228	W-2	BV15	1767	124	47	0	3	3	25
183	W-1	BV16	1768	175	43.4	0	5	5	33
341	W-1	BV17	1769	198	35.5	0	4	7	37
736	W-2	BV18	1770	175	38	0	5	5	28
295	W-1	BV19	1771	207	43	3	3	3	26
1039	W-2	BV20	1772	234	54	5	5	5	24
158	W-1	BV21	1773	181	42	3	4	4	26
482	W-1	BV22	1774	197	50.5	4	7	7	29
860	W-1	BV23	1775	231	45	2	3	3	25
112	W-1	BV24	1776	203	34	4	2	2	31

94	W-1	BW1	1777	278	49	4	3	3	24	
469	W-3	BW2	1778	203	24	2	4	4	29	
736	W-3	BW3	1779	125	40	1	5	8	34	
653	W-2	BW4	1780	153	Top broken		1	2	2	27
57	W-1	BW5	1781	209	42	5	5	5	24	
257	W-3	BW6	1782	67	33.2	2	3	3	26	
26	W-3	BW7	1783	223	53	4	4	4	26	
565	W-3	BW8	1784	261	46	3	4	4	24	
447	W-1	BW9	1785	300	50	4	6	6	27	
506	W-1	BW10	1786	190	48	1	4	4	29	
242	W-1	BW11	1787	123	46	1	4	4	27	
188	W-2	BW12	1788	218	43	3	4	4	22	
494	W-1	BW13	1789	95	34	2	7	7	35	
224	W-2	BW14	1790	167	45	2	4	4	25	
662	W-2	BW15	1791	236	38.4	7	10	10	32	
111	W-2	BW16	1792	242	42.5	3	5	5	25	
446	W-2	BW17	1793	207	44.6	0	8	8	31	
627	W-3	BW18	1794	235	54	2	5	5	27	
441	W-2	BW19	1795	152	41	3	2	2	27	
720	W-2	BW20	1796	198	38	3	3	3	22	
107	W-2	BW21	1797	246	54	0	6	6	30	
566	W-2	BW22	1798	276	43	3	3	3	22	
642	W-3	BW23	1799	27	24.5	3	6	6	26	
835	W-3	BW24	1800	182	46.5	2	4	4	20	
58	W-2	BX1	1801	306	42.5	5	3	3	25	
159	W-3	BX2	1802	290	47	3	2	2	21	
131	W-2	BX3	1803	276	50.4	3	4	4	32	
352	W-3	BX4	1804	27	NO	NO	NO	NO	NO	
162	W-3	BX5	1805	124	45.3	0	6	6	28	
672	W-3	BX6	1806	160	49.5	2	5	5	26	
53	W-2	BX7	1807	298	47.4	2	5	5	23	
21	W-3	BX8	1808	NO	NO	NO	NO	NO	NO	
137	W-2	BX9	1809	371	56.5	2	6	6	31	

520	W-2	BX10	1810	235	51	2	5	5	23	
242	W-2	BX11	1811	185	54.5	1	3	3	26	
191	W-2	BX12	1812	146	37	2	3	3	22	
687	W-3	BX13	1813	151	23.5	3	3	3	22	
95	W-1	BX14	1814	45	27	3	7	7	30	
477	W-1	BX15	1815	271	60	3	5	5	26	
89	W-1	BX16	1816	211	42.3	1	3	3	22	
617	W-3	BX17	1817	212	64.5	0	7	7	31	
608	W-1	BX18	1818	199	54	2	5	5	29	
199	W-2	BX19	1819	228	44.5	3	4	4	24	
336	W-1	BX20	1820	191	30.3	2	3	3	21	
528	W-1	BX21	1821	364	58.1	4	4	4	23	
557	W-2	BX22	1822	232	46	4	4	4	22	
59	W-1	BX23	1823	247	54	3	2	2	24	
65	W-1	BX24	1824	198	51.5	3	3	3	25	
636	W-3	BY1	1825	96	40	1	3	3	26	
620	W-1	BY2	1826	106	49.8	4	3	3	26	
179	W-3	BY3	1827	115	28	4	3	3	34	
719	W-3	BY4	1828	217	25	4	3	3	25	
432	W-2	BY5	1829	289	31	7	3	3	25	
130	W-2	BY6	1830	204	59.2	4	4	4	24	
34	W-2	BY7	1831	234	46.1	1	6	6	30	
341	W-3	BY8	1832	143	50	4	4	4	30	
254	W-1	BY9	1833	110	39	4	2	2	27	
219	W-1	BY10	1834	58	53.2	2	2	2	27	
448	W-2	BY11	1835	261	45.8	7	4	4	27	
945	W-2	BY12	1836	139	44	5	4	4	25	
524	W-1	BY13	1837	244	49	0	7	7	30	
145	W-1	BY14	1838	156	55.2	5	8	8	29	
46	W-3	BY15	1839	257	45	3	3	3	20	
275	W-3	BY16	1840	153	43.5	3	3	4	25	
338	W-1	BY17	1841	237	47	5	3	3	26	
661	W-3	BY18	1842	229	52	3	8	8	26	

203	W-1	BY19	1843	165	43	0	5	5	23	
457	W-3	BY20	1844	281	49.6	2	7	7	29	
501	W-3	BY21	1845	132	53	1	4	4	29	
535	W-1	BY22	1846	0	NO	NO	NO	NO	NO	
216	W-1	BY23	1847	79	24	1	5	5	26	
464	W-1	BY24	1848	286	49	5	3	3	25	
485	W-3	BZ1	1849	243	32	3	3	3	28	
49	W-2	BZ2	1850	175	55	0	7	7	31	
269	W-3	BZ3	1851	295	49	2	4	4	28	
439	W-1	BZ4	1852	249	59.2	0	8	8	31	
238	W-2	BZ5	1853	193	52.9	4	3	3	24	
626	W-3	BZ6	1854	260	49	3	4	4	26	
419	W-3	BZ7	1855	276	47	3	3	3	28	
87	W-1	BZ8	1856	184	62.1	2	2	2	27	
141	W-3	BZ9	1857	247	57	4	4	4	29	
225	W-1	BZ10	1858	267	45	4	3	3	22	
408	W-1	BZ11	1859	302	59	1	6	6	30	
176	W-3	BZ12	1860	90	34.1	1	4	4	24	
262	W-2	BZ13	1861	117	60	2	3	3	26	
270	W-3	BZ14	1862	163	45.6	3	4	4	26	
465	W-1	BZ15	1863	258	51.5	2	4	4	23	
543	W-3	BZ16	1864	245	58	0	7	7	32	
831	W-2	BZ17	1865	254	53	1	3	3	27	
712	W-1	BZ18	1866	186	50	0	3	6	31	
983	W-2	BZ19	1867	382	61.3	5	4	4	24	
707	W-2	BZ20	1868	259	53	0	6	6	33	
295	W-2	BZ21	1869	213	47.2	2	5	5	27	
661	W-2	BZ22	1870	239	51	0	6	6	30	
617	W-2	BZ23	1871	196	67	1	5	5	31	
194	W-1	BZ24	1872	195	49	4	3	3	27	
732	W-1	CA1	1873	239	36	4	3	3	26	
48	W-3	CA2	1874	306	44.5	3	4	4	24	
12	W-1	CA3	1875	274	49.5	4	3	3	26	

467	W-1	CA4	1876	351	39	5	3	3	22	
235	W-2	CA5	1877	165	47.5	3	3	3	27	
529	W-3	CA6	1878	200	40.2	3	4	4	27	
28	W-1	CA7	1879	208	25.5	3	3	3	21	
266	W-3	CA8	1880	101	47	3	4	4	28	
198	W-3	CA9	1881	252	51	0	7	7	32	
738	W-1	CA10	1882	215	53	1	4	4	27	
688	W-3	CA11	1883	225	55.3	3	5	5	25	
332	W-1	CA12	1884	201	52.5	3	3	3	26	
459	W-1	CA13	1885	237	55.5	5	3	3	28	
609	W-3	CA14	1886	232	58.7	3	3	3	27	
722	W-3	CA15	1887	252	60	1	5	5	26	
610	W-1	CA16	1888	314	47.5	5	3	3	24	
27	W-2	CA17	1889	251	53.3	3	4	4	27	
428	W-3	CA18	1890	296	42.1	4	5	5	24	
474	W-1	CA19	1891	281	54.5	5	2	2	23	
169	W-2	CA20	1892	293	43.4	5	5	5	22	
709	W-2	CA21	1893	147	40	3	4	4	26	
75	W-1	CA22	1894	244	47	2	5	5	28	
409	W-1	CA23	1895	215	39.5	0	7	7	31	
413	W-1	CA24	1896	186	27	4	4	4	25	
178	W-1	CB1	1897	178	49	3	3	3	26	
190	W-3	CB2	1898	112	37	3	4	4	32	
111	W-1	CB3	1899	203	44.5	6	4	4	25	
518	W-3	CB4	1900	188	49	0	6	6	28	
121	W-2	CB5	1901	194	49.5	3	5	5	28	
482	W-3	CB6	1902	227	48.5	1	8	8	33	
849	W-1	CB7	1903	266	40	4	3	3	22	
9	W-2	CB8	1904	259	58	3	3	3	24	
36	W-3	CB9	1905	168	55.4	0	5	5	27	
528	W-2	CB10	1906	291	51	2	3	3	21	
286	W-3	CB11	1907	215	54	2	3	3	22	
573	W-1	CB12	1908	216	51	2	3	3	27	

536	W-3	CB13	1909	281	54	3	3	3	27
611	W-1	CB14	1910	293	48.5	2	5	5	27
46	W-2	CB15	1911	210	45	2	4	4	20
128	W-3	CB16	1912	198	52.1	0	3	4	35
554	W-1	CB17	1913	181	40.4	1	5	5	26
230	W-1	CB18	1914	167	51.3	1	4	4	28
38	W-1	CB19	1915	178	49.5	3	3	3	23
636	W-2	CB20	1916	159	49	2	4	4	23
625	W-2	CB21	1917	117	31.8	2	3	3	26
54	W-1	CB22	1918	142	51	0	5	5	28
194	W-3	CB23	1919	164	49	4	4	4	24
106	W-3	CB24	1920	171	54	3	3	3	28
104	W-2	CC1	1921	262	42	4	2	2	23
223	W-2	CC2	1922	147	46	3	4	4	29
200	W-1	CC3	1923	213	49	1	6	6	29
474	W-3	CC4	1924	214	54	4	4	4	25
457	W-2	CC5	1925	206	51.2	2	3	3	26
461	W-1	CC6	1926	226	51.5	1	4	4	25
473	W-2	CC7	1927	96	28	1	3	3	21
600	W-2	CC8	1928	219	53	3	2	2	25
365	W-2	CC9	1929	221	46.5	2	4	4	28
247	W-3	CC10	1930	196	45.8	3	3	3	26
354	W-3	CC11	1931	159	40.1	1	6	6	31
564	W-3	CC12	1932	NO	NO	NO	NO	NO	NO
130	W-3	CC13	1933	195	58	3	3	3	24
469	W-1	CC14	1934	264	23	0	7	7	32
806	W-2	CC15	1935	243	49	0	4	4	23
439	W-3	CC16	1936	198	55.6	0	5	6	32
159	W-2	CC17	1937	225	47	2	4	4	22
485	W-1	CC18	1938	238	32	3	3	3	27
422	W-2	CC19	1939	286	50.5	3	4	4	24
569	W-1	CC20	1940	175	47.3	0	6	8	34
652	W-3	CC21	1941	143	47.5	1	2	2	27

56	W-3	CC22	1942	249	54.2	3	5	5	26
528	W-3	CC23	1943	333	53	3	4	4	23
823	W-1	CC24	1944	266	47.5	2	3	3	23
500	W-1	CD1	1945	162	51.2	4	5	5	24
2	W-1	CD2	1946	289	57	2	4	4	28
536	W-2	CD3	1947	265	47	4	4	4	31
191	W-3	CD4	1948	256	31.4	2	4	4	21
581	W-2	CD5	1949	226	46.1	0	5	5	29
451	W-2	CD6	1950	NO	NO	NO	NO	NO	25
84	W-1	CD7	1951	81	30	2	4	4	24
200	W-3	CD8	1952	172	56	0	6	6	29
436	W-3	CD9	1953	247	56.3	3	7	7	30
133	W-1	CD10	1954	216	27	0	5	5	29
403	W-1	CD11	1955	223	49	3	3	3	26
352	W-1	CD12	1956	153	46.5	2	4	4	30
450	W-3	CD13	1957	236	49	3	3	3	24
424	W-3	CD14	1958	286	55.5	3	3	3	28
352	W-2	CD15	1959	177	51.5	3	2	2	27
541	W-3	CD16	1960	254	43	3	3	3	23
414	W-3	CD17	1961	141	23.5	0	6	6	34
449	W-3	CD18	1962	297	59.8	1	4	4	33
473	W-1	CD19	1963	411	47.5	7	3	3	23
1021	W-1	CD20	1964	333	52	4	5	5	26
216	W-3	CD21	1965	161	32	1	5	5	25
43	W-2	CD22	1966	140	48	0	4	4	29
126	W-1	CD23	1967	240	49.2	0	6	6	27
823	W-3	CD24	1968	236	51.6	3	2	2	26
267	W-2	CE1	1969	185	31.2	4	4	4	28
95	W-3	CE2	1970	144	40	0	5	5	30
558	W-3	CE3	1971	177	42.1	2	4	4	22
625	W-1	CE4	1972	180	24.5	3	3	3	27
130	W-1	CE5	1973	152	49.2	3	4	4	22
554	W-3	CE6	1974	189	49	3	3	3	23

626	W-2	CE7	1975	193	51	5	3	3	26
675	W-1	CE8	1976	186	61.4	2	5	5	26
147	W-3	CE9	1977	162	47	2	5	5	26
641	W-3	CE10	1978	87	38.7	2	5	5	30
460	W-1	CE11	1979	206	53.5	0	5	5	28
180	W-3	CE12	1980	199	47	0	7	7	30
563	W-1	CE13	1981	198	48	3	5	5	26
22	W-2	CE14	1982	211	51	4	3	3	23
98	W-2	CE15	1983	204	47.5	5	3	3	27
241	W-3	CE16	1984	149	51	0	5	5	28
411	W-1	CE17	1985	163	49	0	7	7	30
141	W-2	CE18	1986	223	43.7	4	5	5	24
156	W-3	CE19	1987	92	44.1	2	3	3	24
726	W-3	CE20	1988	117	33.6	3	3	3	25
491	W-3	CE21	1989	131	48.6	1	4	4	28
278	W-3	CE22	1990	69	46	3	3	3	26
511	W-1	CE23	1991	168	44.2	2	5	5	25
639	W-2	CE24	1992	101	43.4	1	3	3	27
518	W-2	CF1	1993	127	51.2	2	4	4	29
267	W-3	CF2	1994	248	47.5	2	6	6	25
182	W-2	CF3	1995	184	47.5	4	4	4	23
477	W-3	CF4	1996	294	67	1	3	3	28
416	W-2	CF5	1997	179	49	2	4	4	20
87	W-3	CF6	1998	177	45	2	3	3	23
259	W-2	CF7	1999	264	48	3	4	4	27
562	W-2	CF8	2000	329	43	3	7	5	22
17	W-2	CF9	2001	352	37	5	4	4	25
664	W-2	CF10	2002	183	56.5	0	6	6	27
849	W-3	CF11	2003	169	50	3	4	4	24
557	W-3	CF12	2004	237	45.5	6	4	3	23
57	W-2	CF13	2005	245	48.5	5	3	3	23
856	W-1	CF14	2006	187	47	3	2	2	24
56	W-1	CF15	2007	NO	NO	NO	NO	NO	NO

460	W-2	CF16	2008	213	67	2	3	3	29
338	W-3	CF17	2009	208	47	3	3	3	26
92	W-3	CF18	2010	175	47	3	4	4	26
272	W-3	CF19	2011	155	47	0	5	5	27
347	W-1	CF20	2012	251	41.5	5	3	3	22
512	W-1	CF21	2013	217	41.3	3	2	2	25
512	W-3	CF22	2014	235	43.9	4	4	4	23
4	W-1	CF23	2015	211	49	2	4	4	24
22	W-1	CF24	2016	171	37.9	3	3	3	23
210	W-3	CG1	2017	184	25	3	3	3	20
479	W-1	CG2	2018	258	58.4	4	3	3	21
166	W-1	CG3	2019	187	53	1	3	3	26
358	W-3	CG4	2020	205	44	4	3	3	22
301	W-1	CG5	2021	185	48	3	3	3	29
642	W-2	CG6	2022	189	26	2	4	4	26
565	W-2	CG7	2023	216	46.5	3	4	4	23
180	W-1	CG8	2024	201	51.9	2	5	5	29
94	W-3	CG9	2025	274	55	4	3	3	24
447	W-3	CG10	2026	254	47	5	6	6	24
494	W-3	CG11	2027	195	45	0	6	6	34
239	W-3	CG12	2028	95	31	2	3	3	22
131	W-3	CG13	2029	248	43.5	2	6	6	29
732	W-2	CG14	2030	228	43.8	3	3	3	27
658	W-3	CG15	2031	290	55.2	0	8	8	32
4	W-2	CG16	2032	218	48	3	5	5	27
237	W-1	CG17	2033	87	45	3	3	3	23
567	W-3	CG18	2034	239	49	2	4	4	31
580	W-3	CG19	2035	168	51.5	4	3	3	24
114	W-2	CG20	2036	236	56	2	4	4	27
91	W-3	CG21	2037	254	47	2	3	3	26
265	W-2	CG22	2038	189	46	3	4	4	31
217	W-3	CG23	2039	141	41	4	3	3	23
129	W-2	CG24	2040	173	49	3	2	2	29

48	W-1	CH1	2041	157	52	4	3	3	26
429	W-2	CH2	2042	222	49.2	2	4	4	25
553	W-1	CH3	2043	376	37.2	4	4	5	34
331	W-1	CH4	2044	186	53.4	4	4	4	27
686	W-3	CH5	2045	118	51	3	2	2	28
269	W-1	CH6	2046	0	33	3	2	2	30
666	W-1	CH7	2047	482	69	2	5	5	27
519	W-2	CH8	2048	220	55	2	4	4	28
464	W-2	CH9	2049	294	50	3	3	3	25
486	W-3	CH10	2050	246	57.5	2	4	4	25
248	W-3	CH11	2051	193	42.4	4	3	3	28
566	W-1	CH12	2052	88	42	0	2	2	24
672	W-1	CH13	2053	243	62.1	3	3	3	29
159	W-1	CH14	2054	315	46.3	4	4	4	19
363	W-1	CH15	2055	140	51	0	4	4	27
355	W-2	CH16	2056	271	51	5	4	4	27
615	W-2	CH17	2057	206	43	1	3	3	21
442	W-2	CH18	2058	155	46.2	3	3	3	30
65	W-2	CH19	2059	260	46	3	3	3	24
419	W-1	CH20	2060	247	46.5	5	3	3	27
126	W-3	CH21	2061	249	56	0	5	5	27
1032	W-2	CH22	2062	213	27.1	1	6	7	25
1	W-3	CH23	2063	378	48	6	2	2	20
52	W-2	CH24	2064	236					22
409	W-2	CI1	2065	247	41.7	0	8	8	31
215	W-3	CI2	2066	249	30.5	4	4	4	22
593	W-1	CI3	2067	203	51	3	3	3	26
269	W-2	CI4	2068	287	57	0	2	2	31
472	W-1	CI5	2069	289	29	3	4	4	21
664	W-1	CI6	2070	176	56	0	4	4	28
166	W-3	CI7	2071	229	51	2	3	3	24
80	W-1	CI8	2072	228	53	2	4	4	28
569	W-3	CI9	2073	250	54.5	0	7	7	33

738	W-2	CI10	2074	223	49	0	6	6	34
186	W-1	CI11	2075	243	42	4	3	3	25
29	W-2	CI12	2076	247	55	3	2	2	26
541	W-1	CI13	2077	263	36	2	3	3	24
455	W-1	CI14	2078	206					30
125	W-1	CI15	2079	218	52	0	7	7	30
652	W-1	CI16	2080	224	47	1	3	3	27
239	W-1	CI17	2081	118	35	1	3	3	21
118	W-1	CI18	2082	241	53.6	3	3	3	25
408	W-3	CI19	2083	295	61	2	4	4	30
281	W-2	CI20	2084	217	49	4	6	6	30
243	W-2	CI21	2085	200	54	4	5	5	26
461	W-2	CI22	2086	279	56	3	3	3	27
691	W-1	CI23	2087	259	37	1	2	2	22
29	W-3	CI24	2088	291	54.1	4	4	4	24
496	W-3	CJ1	2089	285	46	5	6	6	28
437	W-1	CJ2	2090	217	49	5	4	4	27
883	W-2	CJ3	2091	168	47.5	2	3	3	23
27	W-1	CJ4	2092	162	51	4	4	4	27
73	W-3	CJ5	2093	236	51	3	4	4	24
511	W-3	CJ6	2094	261	51.5	3	3	3	26
508	W-1	CJ7	2095	205	52				29
68	W-1	CJ8	2096	257	56.7	3	4	4	24
95	W-2	CJ9	2097	106	47.6	3	3	3	30
483	W-3	CJ10	2098	264	41				28
719	W-2	CJ11	2099	127	25	4	4	4	26
564	W-2	CJ12	2100	198	53.4	2	4	4	29
112	W-3	CJ13	2101	234	32	5	0	0	29
358	W-1	CJ14	2102	173	47.2	4	2	2	27
854	W-1	CJ15	2103	335	54	5	2	2	23
435	W-2	CJ16	2104	213	47.5	3	3	3	25
112	W-2	CJ17	2105	219	49	1	5	5	30
436	W-2	CJ18	2106	275	49	2	4	4	27

471	W-3	CJ19	2107	249					31
503	W-3	CJ20	2108	162					28
415	W-2	CJ21	2109	304	34	4	3	3	23
410	W-3	CJ22	2110	223	45	4	3	3	24
579	W-3	CJ23	2111	209	54	2	3	3	25
30	W-1	CJ24	2112	247	46.2	5	3	3	22
115	W-1	CK1	2113	282	45	3	3	3	20
609	W-2	CK2	2114	415	64	2	5	5	24
608	W-2	CK3	2115	187	NO	NO	NO	NO	NO
575	W-3	CK4	2116	193	48	4	4	4	23
666	W-2	CK5	2117	324	61	2	4	4	26
53	W-3	CK6	2118	179	42	4	5	5	22
465	W-2	CK7	2119	226	43.1	2	2	2	21
97	W-2	CK8	2120	199	48	4	4	4	23
133	W-2	CK9	2121	206	26	2	5	5	29
640	W-1	CK10	2122	183	36.5	1	3	3	23
560	W-2	CK11	2123	263	35.5	4	3	3	21
47	W-3	CK12	2124	111	42	1	3	3	23
267	W-1	CK13	2125	25	36	3	4	4	28
100	W-3	CK14	2126	77	45	3	4	4	27
38	W-3	CK15	2127	261	48	3	3	3	24
856	W-3	CK16	2128	48	31	1	4	4	25
445	W-3	CK17	2129	287	54.5	3	4	4	27
177	W-3	CK18	2130	160					24
109	W-2	CK19	2131	199	54	2	4	4	25
471	W-1	CK20	2132	274	48.1	6	6	6	28
290	W-3	CK21	2133	212	53	5	3	3	24
562	W-1	CK22	2134	284	43	3	5	5	22
523	W-3	CK23	2135	260	52	4	3	3	25
53	W-1	CK24	2136	265	45				24
247	W-1	CL1	2137	145	50	4	4	4	23
215	W-1	CL2	2138	178	28	3	3	3	22
472	W-2	CL3	2139	279	28	4	3	3	22

481	W-1	CL4	2140	257	54	0	4	4	33	
273	W-2	CL5	2141	126	43	3	2	2	23	
615	W-3	CL6	2142	215	43.6	4	3	3	21	
156	W-1	CL7	2143	198	46	3	3	3	23	
589	W-2	CL8	2144	152	Top broken		4	3	3	25
462	W-2	CL9	2145	174	42	2	3	3	24	
143	W-2	CL10	2146	258	64	0	9	12	48	
46	W-1	CL11	2147	212	46	2	3	3	20	
489	W-1	CL12	2148	181	52	3	3	3	24	
190	W-2	CL13	2149	101	36	3	2	2	26	
411	W-3	CL14	2150	257	55.5	2	7	7	30	
129	W-1	CL15	2151	336	60.5	3	5	5	29	
252	W-1	CL16	2152	161	23.2	1	3	3	22	
510	W-2	CL17	2153	203	49.5	4	3	3	32	
492	W-1	CL18	2154	154	51	2	4	4	25	
111	W-3	CL19	2155	258	49	3	4	4	26	
434	W-2	CL20	2156	244	56	3	2	2	25	
55	W-3	CL21	2157	234	26	2	3	3	23	
151	W-1	CL22	2158	426	39	7	4	4	33	
452	W-3	CL23	2159	209	51	3	3	3	29	
525	W-1	CL24	2160	164	46	0	6	6	31	
264	W-1	CM1	2161	265	20	1	5	5	33	
300	W-3	CM2	2162	112	31	3	3	3	23	
241	W-2	CM3	2163	163	47.2	3	3	3	27	
17	W-3	CM4	2164	284	37	3	4	4	27	
52	W-3	CM5	2165	189	42	3	4	4	23	
98	W-1	CM6	2166	90	28	3	3	3	26	
833	W-3	CM7	2167	218	27	3	2	2	26	
525	W-2	CM8	2168	273	46.2	2	5	5	32	
477	W-2	CM9	2169	331	69	3	5	5	28	
835	W-1	CM10	2170	287	55.5	3	4	4	22	
151	W-2	CM11	2171	382	38	4	3	3	22	
641	W-1	CM12	2172	261	45	3	5	5	29	

687	W-2	CM13	2173	210	26	3	3	3	22
620	W-2	CM14	2174	178	52.8	3	5	5	26
230	W-2	CM15	2175	189	40	3	1	4	35
659	W-2	CM16	2176	246	51	2	5	5	29
26	W-1	CM17	2177	225	63	1	4	4	27
247	W-2	CM18	2178	142	33	4	3	3	25
607	W-3	CM19	2179	102	24	3	4	4	25
675	W-2	CM20	2180	275	58.4	2	4	4	30
57	W-3	CM21	2181	212	45	5	4	4	26
491	W-2	CM22	2182	179	49.7	0	5	5	30
238	W-3	CM23	2183	195	50.8	3	3	3	24
97	W-1	CM24	2184	159	44.5	3	3	3	23
36	W-2	CN1	2185	164	62	1	5	5	27
444	W-3	CN2	2186	211	46	3	2	2	23
489	W-2	CN3	2187	167	49.3	2	2	2	21
279	W-2	CN4	2188	178	20	3	3	3	24
606	W-1	CN5	2189	249	42.1	3	5	5	25
273	W-3	CN6	2190	114	43.6	2	4	4	26
424	W-1	CN7	2191	294	47.5	4	4	4	28
453	W-3	CN8	2192	148	49.5	1	5	5	29
266	W-2	CN9	2193	141	49	1	4	4	27
58	W-1	CN10	2194	156	40	3	3	3	26
551	W-2	CN11	2195	274	48	3	4	4	27
647	W-1	CN12	2196	279	42	3	2	2	23
653	W-3	CN13	2197	151	50.6	2	4	4	28
3	W-3	CN14	2198	234	54	5	5	5	28
498	W-2	CN15	2199	infertile	46	3	4	4	26
41	W-2	CN16	2200	170	49.2	4	3	3	23
558	W-1	CN17	2201	259	43	2	3	3	25
691	W-2	CN18	2202	245	59.5	0	7	8	30
48	W-2	CN19	2203	210	54	4	3	3	24
533	W-2	CN20	2204	235	45	4	2	2	19
607	W-2	CN21	2205	313	21	4	3	3	27

355	W-1	CN22	2206	238	48.5	5	5	5	26
187	W-2	CN23	2207	227	50.5	3	5	5	26
98	W-3	CN24	2208	211	41.5	3	3	3	26
254	W-2	CO1	2209	81	34	4	3	3	24
602	W-2	CO2	2210	174	47	2	3	3	24
85	W-1	CO3	2211	4	16	4	3	3	37
505	W-1	CO4	2212	205	44.2	3	3	3	25
143	W-3	CO5	2213	249	51	2	7	7	30
413	W-2	CO6	2214	139	26.5	4	3	3	24
579	W-1	CO7	2215	208		3	4	4	21
569	W-2	CO8	2216	211	NO	NO	NO	NO	NO
84	W-3	CO9	2217	213	32.1	2	4	4	22
241	W-1	CO10	2218	176	41	3	4	4	29
863	W-1	CO11	2219	291	46	4	3	3	22
235	W-1	CO12	2220	169	50	3	4	4	26
419	W-2	CO13	2221	245	46.5	4	4	4	26
446	W-1	CO14	2222	213	47.8	0	5	5	31
222	W-2	CO15	2223	229	48	2	2	2	24
831	W-1	CO16	2224	171	55	2	2	2	25
223	W-1	CO17	2225	119	40.5	3	5	5	26
278	W-1	CO18	2226	235	32	3	4	4	29
654	W-1	CO19	2227	238	39	1	4	4	36
145	W-2	CO20	2228	314	62	5	4	4	28
338	W-2	CO21	2229	254	48.7	4	2	2	26
295	W-3	CO22	2230	206	27	4	2	2	25
52	W-1	CO23	2231	167	48.3	4	3	3	23
505	W-3	CO24	2232	102	32.3	2	3	3	22
170	W-1	CP1	2233	176	32	5	4	4	23
1032	W-3	CP2	2234	372	22	5	4	4	29
271	W-2	CP3	2235	119	32	5	4	4	27
6	W-1	CP4	2236	NO	NO	NO	NO	NO	NO
461	W-3	CP5	2237	18	17	0	1	3	30
272	W-1	CP6	2238	46	53.1	0	6	6	25

450	W-1	CP7	2239	81	36	3	1	1	33
603	W-1	CP8	2240	249	44	3	1	1	29
96	W-3	CP9	2241	276	50.2	5	3	3	26
500	W-2	CP10	2242	142	53.4	2	4	4	28
427	W-1	CP11	2243	157	53	4	3	3	22
479	W-2	CP12	2244	268	54	5	3	4	31
210	W-2	CP13	2245	243	28	3	4	4	22
410	W-1	CP14	2246	203	40	4	3	3	20
1028	W-3	CP15	2247	189	28.2	3	3	3	22
449	W-1	CP16	2248	448	55	4	3	3	35
167	W-2	CP17	2249	38	NO	NO	NO	NO	NO
232	W-1	CP18	2250	231	51	5	4	4	27
77	W-1	CP19	2251	111	43.8	3	2	2	26
686	W-1	CP20	2252	211	54.8	4	3	3	24
7	W-1	CP21	2253	87	28.2	1	4	4	29
854	W-2	CP22	2254	229	48	3	4	4	25
258	W-1	CP23	2255	140	NO	NO	NO	NO	NO
580	W-1	CP24	2256	200	49.5	3	4	4	23
30	W-2	CQ1	2257	224	47	4	3	3	21
286	W-2	CQ2	2258	162	58.5	2	3	3	22
459	W-2	CQ3	2259	309	59	0	8	8	31
56	W-2	CQ4	2260	36	NO	NO	NO	NO	NO
642	W-1	CQ5	2261	201	28.1	3	6	6	25
266	W-1	CQ6	2262	154	49	1	4	4	26
465	W-3	CQ7	2263	239	45	2	3	3	23
215	W-2	CQ8	2264	215					22
687	W-1	CQ9	2265	209	29	3	2	2	22
137	W-3	CQ10	2266	273	53	3	3	3	27
736	W-1	CQ11	2267	139	49.1	0	4	4	31
409	W-3	CQ12	2268	180	37	0	7	7	31
888	W-1	CQ13	2269	209	57.5	2	3	3	23
134	W-2	CQ14	2270	253	46	4	2	2	22
191	W-1	CQ15	2271	329	28	3	3	3	22

1039	W-3	CQ16	2272	260	54.7	2	5	5	27	
195	W-1	CQ17	2273	31	27	0	5	5	28	
248	W-1	CQ18	2274	98	48.2	1	4	4	29	
709	W-3	CQ19	2275	170	54	3	3	3	26	
212	W-1	CQ20	2276	99	40.1	3	3	3	25	
611	W-3	CQ21	2277	218	48	2	4	4	24	
18	W-2	CQ22	2278	219	56.5	4	3	3	23	
270	W-2	CQ23	2279	177	47	4	3	3	26	
856	W-2	CQ24	2280	181	44	3	3	3	24	
402	W-1	CR1	2281	206	59	5	3	3	24	
495	W-1	CR2	2282	198	50.5	2	3	3	20	
520	W-3	CR3	2283	227	52	1	6	6	27	
116	W-2	CR4	2284	257	42	5	2	2	30	
183	W-2	CR5	2285	164	40	0	3	4	32	
168	W-3	CR6	2286	56	37	3	2	2	28	
216	W-2	CR7	2287	101	31	3	3	3	24	
42	W-2	CR8	2288	199	47	3	5	5	26	
347	W-3	CR9	2289	195	47	5	3	3	24	
72	W-1	CR10	2290	89	46.5	2	5	5	22	
183	W-3	CR11	2291	NO	NO	NO	NO	NO	NO	
243	W-1	CR12	2292	86	46.3	4	6	6	24	
49	W-1	CR13	2293	143	43.2	1	5	5	27	
9	W-3	CR14	2294	207	60	2	3	3	24	
609	W-1	CR15	2295	258	61	3	3	3	24	
166	W-2	CR16	2296	131	41	3	3	3	22	
806	W-1	CR17	2297	271	50	3	3	3	25	
224	W-1	CR18	2298	147	44	5	5	5	26	
547	W-1	CR19	2299	236	50	1	5	5	25	
12	W-3	CR20	2300	246	51.2	3	3	3	25	
610	W-3	CR21	2301	314	48	6	3	3	24	
248	W-2	CR22	2302	205	52	2	2	4	24	
486	W-2	CR23	2303	318	59	4	5	5	25	
589	W-1	CR24	2304	225	54.5	2	5	5	26	

721	W-2	CS1	2305	145	49	0	5	5	29	
1028	W-1	CS2	2306	195	30	3	4	4	26	
560	W-1	CS3	2307	326	37.6	5	3	3	22	
177	W-1	CS4	2308	246					25	
403	W-3	CS5	2309	197	51	0	3	3	25	
26	W-2	CS6	2310	187	59.5	0	5	5	26	
508	W-2	CS7	2311	344	53	2	6	6	24	
666	W-3	CS8	2312	557	66	6	4	4	26	
186	W-2	CS9	2313	270	51	5	2	2	23	
501	W-2	CS10	2314	213	49	4	2	2	22	
837	W-3	CS11	2315	238	53.5	4	3	3	26	
204	W-2	CS12	2316	117	39.5	0	6	6	27	
42	W-3	CS13	2317	61	36	0	1	1	25	
529	W-2	CS14	2318	178	52	2	5	5	25	
543	W-2	CS15	2319	237	48	0	6	6	35	
659	W-1	CS16	2320	170	41	0	5	5	27	
547	W-2	CS17	2321	170	40.5	7	1	1	29	
440	W-3	CS18	2322	210	58	3	4	4	26	
103	W-1	CS19	2323	54	32	3	5	5	28	
492	W-3	CS20	2324	201	51.5	3	3	3	24	
249	W-2	CS21	2325	229	50.4	2	6	6	26	
92	W-2	CS22	2326	153	43	3	4	4	26	
36	W-1	CS23	2327	189	63.1	0	5	5	27	
617	W-1	CS24	2328	228	62	1	3	3	32	
607	W-1	CT1	2329	258	27	4	4	4	26	
530	W-2	CT2	2330	178	45.8	2	5	5	29	
476	W-2	CT3	2331	225	47.2	2	3	3	25	
106	W-2	CT4	2332	216	52.5	0	6	6	29	
573	W-2	CT5	2333	191	48	2	3	3	26	
100	W-2	CT6	2334	202	48.8	5	4	4	25	
530	W-3	CT7	2335	177	48	2	5	5	28	
114	W-3	CT8	2336	229	62.1	0	5	6	35	
224	W-3	CT9	2337	224	47	5	3	3	26	

76	W-2	CT10	2338	186	51	1	3	3	25
530	W-1	CT11	2339	210	48	7	5	5	28
536	W-1	CT12	2340	245	48.5	3	4	4	28
121	W-3	CT13	2341	252	55.3	2	5	5	27
28	W-2	CT14	2342	152	33	3	2	2	24
331	W-2	CT15	2343	237	56	4	4	4	28
403	W-2	CT16	2344	251	51.2	3	3	3	25
147	W-1	CT17	2345	NO	NO	NO	NO	NO	NO
223	W-3	CT18	2346	133	42	3	6	6	26
664	W-3	CT19	2347	226	47.5	5	4	4	27
355	W-3	CT20	2348	231	51.5	5	5	5	25
628	W-2	CT21	2349	126	35	3	4	4	25
158	W-3	CT22	2350	214	47	4	5	5	32
67	W-2	CT23	2351	139	42	1	3	3	21
833	W-2	CT24	2352	231	30.5	3	3	3	26
262	W-1	CU1	2353	22	42	3	4	4	29
363	W-3	CU2	2354	174	42.4	3	4	4	27
513	W-1	CU3	2355	206	45	3	3	3	22
125	W-2	CU4	2356	201	49.4	1	3	3	28
663	W-2	CU5	2357	284	59	2	3	3	21
21	W-1	CU6	2358	224	38.6	3	2	2	25
155	W-1	CU7	2359	273	50	3	3	3	21
591	W-3	CU8	2360	251	51.2	4	3	3	23
591	W-1	CU9	2361	237	48	5	3	3	22
512	W-2	CU10	2362	227	40	2	3	3	24
598	W-1	CU11	2363	250	51.3	1	4	4	28
200	W-2	CU12	2364	201	55.5	5	5	5	25
118	W-2	CU13	2365	192	37	3	3	3	24
164	W-2	CU14	2366	159	52.5	2	3	3	23
555	W-3	CU15	2367	252	44	3	4	4	22
182	W-3	CU16	2368	242	55.4	3	4	4	25
22	W-3	CU17	2369	356	54	3	3	3	25
592	W-1	CU18	2370	302	41.2	5	4	4	30

414	W-1	CU19	2371	111	18	3	3	5	29
828	W-2	CU20	2372	324	61	3	8	8	27
336	W-3	CU21	2373	216	39.2	2	6	6	22
54	W-3	CU22	2374	146	52	0	5	5	28
10	W-3	CU23	2375	223	53	5	1	1	31
888	W-2	CU24	2376	227	43	2	3	3	32
67	W-3	CV1	2377	119	41	3	3	3	20
402	W-2	CV2	2378	250	55	6	4	4	25
41	W-1	CV3	2379	293	54	5	2	2	22
432	W-1	CV4	2380	144	29.8	4	4	4	25
73	W-2	CV5	2381	169	48.4	5	5	5	22
6	W-2	CV6	2382	NO	NO	NO	NO	NO	NO
271	W-3	CV7	2383	103	35.1	4	2	2	26
188	W-3	CV8	2384	295	49.5	5	3	3	22
217	W-1	CV9	2385	291	46	5	4	4	23
151	W-3	CV10	2386	348	45	8	2	2	22
518	W-1	CV11	2387	194	53.5	1	5	5	33
410	W-2	CV12	2388	116	41	3	2	2	21
441	W-3	CV13	2389	197	49.6	3	5	5	25
128	W-1	CV14	2390	296	44	3	9	9	34
823	W-2	CV15	2391	271	35	4	2	2	28
863	W-3	CV16	2392	160		2	3	3	22
246	W-3	CV17	2393	96	45.2	0	6	6	29
529	W-1	CV18	2394	215	43	4	4	4	31
68	W-2	CV19	2395	227	56	3	3	3	22
439	W-2	CV20	2396	299	55	1	7	7	30
32	W-2	CV21	2397	288	30	4	4	4	26
455	W-2	CV22	2398	216	44	2	2	2	30
422	W-1	CV23	2399	239	39	6	5	5	26

Primary data: Chapter 4

cross #	DG	DB	DFF	LC	RS	RS
SC1595	27-Feb	26-Mar	02-Apr	8	1.5	1.7
SC1597	01-Mar	26-Mar	02-Apr	8	1.8	0.7
SC1598	01-Mar	28-Mar	03-Apr	8	1.1	1.5
SC1599	27-Feb	27-Mar	03-Apr	9	1.8	1.2
SC1601	27-Feb	26-Mar	02-Apr	8	1.7	1
SC1602	27-Feb	27-Mar	04-Apr	8	1.6	0.9
SC1603	27-Feb	28-Mar	03-Apr	6	1.1	1.5
SC1605	27-Feb	23-Mar	31-Mar	8	1.5	2.1
SC1606		dead				
SC1607	27-Feb	26-Mar	02-Apr	8	1.5	0.9
SC1608	27-Feb	25-Mar	01-Apr	8	1.2	2.1
SC1609	27-Feb	26-Mar	01-Apr	8	1.5	1.1
SC1611	27-Feb	28-Mar	03-Apr	8	1.2	0.6
SC1613	27-Feb	29-Mar	06-Apr	8	1.3	2.1
SC1616	27-Feb	23-Mar	30-Mar	8	1.8	1.2
SC1617	27-Feb	29-Mar	05-Apr	8	1.6	0.9
SC1618	07-Mar	25-Mar	01-Apr	6	1.1	0.7
SC1619						
SC1620	26-Feb					
SC1621	27-Feb	26-Mar	03-Apr	8	1.2	1.9
SC1622	27-Feb	27-Mar	03-Apr	8	1.7	1.1
SC1623	27-Feb	29-Mar	04-Apr	8	1.4	0.6
SC1624	27-Feb	29-Mar	05-Apr	8	1.6	1.1
SC1625	27-Feb	28-Mar	03-Apr	8	1	1.9

SC1626	27-Feb	25-Mar	01-Apr	8	1.9	1.4
SC1627	24-Feb	25-Mar	29-Mar	8	1.4	1.3
SC1629	24-Feb	23-Mar	29-Mar	7	1.5	1.8
SC1659	26-Feb	27-Mar	02-Apr	9	2	2.1
SC1732	26-Feb	26-Mar	01-Apr	8	1.2	1
SC1734	24-Feb	26-Mar	01-Apr	8	1.5	1.1
SC1644	24-Feb	29-Mar	04-Apr	6	2	1.6
SC1647	26-Feb	28-Mar	03-Apr	9	1.9	1.1
SC1648	26-Feb	26-Mar	01-Apr	7	1.8	2
SC1653	24-Feb	27-Mar	04-Apr	9	1.4	1.9
SC1655	25-Feb	28-Mar	04-Apr	6	1.8	1.1
SC1657	26-Feb	27-Mar	01-Apr	7	1.2	0.9
SC1658	25-Feb	25-Mar	01-Apr	8	1.7	1.1
SC1660	26-Feb	30-Mar	03-Apr	8	1.8	1.4
SC1661	25-Feb	30-Mar	06-Apr	8	1.1	1.8
SC1670	26-Feb	29-Mar	04-Apr	8	1.1	1.2
SC1672	25-Feb	28-Mar	05-Apr	8	1.6	1.1
SC1673	25-Feb	26-Mar	02-Apr	8	2.3	1.5
SC1675	26-Feb	24-Mar	30-Mar	7	1.7	1.1
SC1678	26-Feb	28-Mar	04-Apr	8	1.6	1.9
SC1679	24-Feb	25-Mar		8	1.7	1.6
SC1680	26-Feb	29-Mar	03-Apr	7	2.1	1.7
SC1682	26-Feb	29-Mar	03-Apr	9	1.2	1.8
SC1683	24-Feb	26-Mar	01-Apr	9	2.3	1.9
SC1685	24-Feb	27-Mar	02-Apr	8	1.6	1.3
SC1686	26-Feb	28-Mar	03-Apr	9	1.4	1.1
SC1687	26-Feb	25-Mar	30-Mar	8	1.9	1.2

SC1688	26-Feb	29-Mar	04-Apr	8	1.8	0.9
SC1689	26-Feb	25-Mar	30-Mar	8	1.8	1.5
SC1737	25-Feb	26-Mar	02-Apr	8	1.1	1
SC1738	26-Feb	30-Mar	04-Apr	6	1.5	0.9
SC1739	24-Feb	26-Mar	02-Apr	8	1.8	2.3
SC1740	24-Feb	28-Mar	03-Apr	6	1.2	0.9
SC1741	26-Feb	29-Mar	04-Apr	8	1.7	1.2
SC1742	24-Feb	27-Mar	02-Apr	8	1.5	2
SC1743	26-Feb	28-Mar	03-Apr	8	2.1	1.4
SC1650	27-Feb	26-Mar	01-Apr	8	1.7	1.1
SC1731	27-Feb	29-Mar	06-Apr	8	1.2	1.9
SC1614	26-Feb	29-Mar	06-Apr	8	1.7	1.3
SC1615	25-Feb	27-Mar	04-Apr	7	1.9	1.1
SC1637	25-Feb	28-Mar	04-Apr	8	1.6	1.1
SC1638	25-Feb	29-Mar	06-Apr	8	1.8	1.1
SC1662	25-Feb	04-Apr	04-Apr	6	1.5	1
SC1664	25-Feb	31-Mar	07-Apr	8	1.5	1
SC1665	27-Feb	28-Mar	03-Apr	8	1.7	1.1
SC1666	25-Feb	28-Mar	04-Apr	8	1.7	1.1
SC1668	27-Feb	24-Mar	30-Mar	9	1.6	1.5
SC1681	27-Feb	25-Mar	01-Apr	8	1.8	1
SC1745	24-Feb	30-Mar	11-Apr	8	2.1	1.6
SC1746	24-Feb	28-Mar	02-Apr	7	2.1	1.3
SC1747	01-Mar	29-Mar	06-Apr	8	1	1.2
SC1748	27-Feb	02-Apr	10-Apr	6	0.6	1
SC1749	25-Feb	31-Mar	07-Apr	8	1.4	0.9
SC1750	25-Feb	01-Apr	10-Apr	6	0.6	1

SC1752	27-Feb	29-Mar	05-Apr	8	1.3	1
SC1753	27-Feb	02-Apr	08-Apr	8	0.9	0.5
SC1754	27-Feb	30-Mar	07-Apr	6	0.9	1
SC1755	25-Feb	28-Mar	04-Apr	8	1.3	1.1
SC1756	25-Feb	17-Apr		8	1.5	1.1
SC1757	25-Feb	06-Apr	14-Apr	8	1.2	0.7
Sc1758	25-Feb	30-Mar	06-Apr	8	1	1.5
SC1759	25-Feb	31-Mar	09-Apr	8		
SC1760	25-Feb	01-Apr	11-Apr	8	1.2	1.1
SC1762	27-Feb	30-Mar	09-Apr	8	1.2	1.2
SC1763	27-Feb	27-Mar	03-Apr	8	1.1	1.4
SC1764	27-Feb	30-Mar	07-Apr	9	1.5	1.1
SC1766	27-Feb	30-Mar	07-Apr	8	0.8	1
SC1767	27-Feb	01-Mar	09-Apr	6	0.9	1.1
SC1691	27-Feb	01-Apr	07-Apr	8	1.2	1.5
SC1693	27-Feb	09-Apr	14-Apr	6	1.3	0.6
SC1694	01-Mar	31-Mar	08-Apr	8	1.2	0.9
SC1695	27-Feb	30-Mar	06-Apr	8	1.2	1
SC1696	27-Feb	29-Mar	05-Apr	8	1.4	0.9
SC1699	01-Mar	28-Mar	04-Apr	6	0.9	1
SC1701	27-Feb	29-Mar	04-Apr	8	1.2	0.7
SC1702	24-Feb	01-Apr	08-Apr	8	1.7	1.4
SC1703	24-Feb	06-Apr	13-Apr	8	1.4	0.9
SC1704	27-Feb	04-Apr	10-Apr	8	1.2	0.9
SC1705	24-Feb	28-Mar	02-Apr	8	1.3	0.9
SC1706	23-Feb	31-Mar	10-Apr	8	1.5	0.9
SC1707	24-Feb	31-Mar	02-Apr	8	1.2	1.7

SC1708	27-Feb	29-Mar	06-Apr	8	1	1.1
SC1709	27-Feb	29-Mar	08-Apr	8	1	1
SC1710	24-Feb	27-Mar	05-Apr	8	1	1.2
SC1711	27-Feb	28-Mar	05-Apr	8	1	1.5
SC1712	24-Feb	29-Mar	06-Apr	8	1.5	1.2
SC1713	01-Mar	29-Mar	05-Apr	8	0.9	1
SC1716	27-Feb	29-Mar	06-Apr	6	1.2	1
SC1717	27-Feb	04-Apr	12-Apr	6	1.2	0.9
SC1719	27-Feb	29-Mar	04-Apr	9	1.8	1.1
SC1721	27-Feb	23-Mar	29-Mar	11	2	2.2
SC1722	27-Feb	02-Apr	12-Apr	6	1.1	1.3
SC1723	01-Mar	31-Mar	08-Apr	6	0.7	0.9
SC1724	27-Feb	27-Mar	03-Apr	8	1.1	1.4
SC1726	27-Feb	30-Mar	07-Apr	8	1	0.8
SC1727	27-Feb	28-Mar	04-Apr	9	1.1	1.2
SC1798	02-Mar	01-Apr	07-Apr	4	0.6	0.5
SC1799	27-Feb	27-Mar	03-Apr	9	2	1
SC1632	27-Feb	28-Mar	04-Apr	6	0.8	1.1
SC1633	27-Feb	28-Mar	03-Apr	8	1.4	1.1
SC1634	27-Feb	29-Mar	06-Apr	8	1.2	0.9
SC1635	01-Mar	29-Mar	06-Apr	8	1.1	1.2
SC1636	04-Mar	29-Mar	05-Apr	6	0.7	0.7
SC1642	01-Mar	25-Mar	01-Apr	6	1.2	1.8
SC1643	27-Feb	29-Mar	06-Apr	8	1.9	1.2
SC1769	01-Mar	27-Mar	02-Apr	7	1.6	1
SC1771	27-Mar	31-Mar	07-Apr	6	1.7	0.7
SC1773	10-Mar	10-Apr	12-Apr	4	0.5	0.1

SC1774	24-Feb	27-Mar	03-Apr	7	1.8	1.6
SC1776	27-Feb	29-Mar	05-Apr	6	1.4	1.1
SC1777	27-Feb	04-Apr	18-Apr	6	0.6	1
SC1779	24-Feb	27-Mar	03-Apr	9	1.8	1.9
SC1780	27-Feb	04-Apr	17-Apr	8	1.6	1.2
SC1781	27-Feb	04-Apr	11-Apr	6	1.5	1.2
SC1782	04-Mar	30-Mar	05-May	4	0.5	0.2
SC1784	27-Feb	07-Apr	13-Apr	7	1.5	1.1
SC1785	01-Mar	24-Mar	01-Apr	8	2	0.9
SC1787	27-Feb	10-Apr	17-Apr	8	1.7	1.2
SC1788	01-Mar	04-Apr	10-Apr	6	1.1	0.4
SC1790	02-Mar	29-Mar	04-Apr	8	1.9	1.2
SC1791	25-Feb					
SC1792	01-Mar	29-Mar	04-Apr	8	1.7	1.2
SC1793	01-Mar	01-Apr	09-Apr	4	0.1	0.1
SC1794						
SC1795	27-Feb	30-Mar	07-Apr	8	1.4	0.9
SC1796	25-Feb	28-Mar	03-Apr	8	1.4	0.3
SC1797	01-Mar	01-Apr	10-Apr	6	0.5	0.4
SC1802	27-Feb	08-Apr	13-Apr	8	1.6	1.2
SC1803	22-Feb	02-Apr	13-Apr	8	1.7	1.5
SC1804	24-Feb	01-Apr	07-Apr	7	1.6	1.1
SC1805						
SC1806						
SC1807						
SC1808						
SC1809						

SC1810						
SC1811	10-Mar	29-Mar	08-Apr	2	0.6	0.2
SC1812						
SC1818						
SC1820	24-Feb	02-Apr	10-Apr	8	1.9	1.4
SC1821	22-Feb	29-Mar	06-Apr	9	2.2	1.9
SC1822	23-Feb	29-Mar	07-Apr	8	1.9	2.1
SC1823						
SC1824						
SC1825	23-Feb	30-Mar	05-Apr	7	1.3	1.2
SC1826						
SC1827	23-Feb	01-Apr	06-Apr	7	1.3	1.1
SC1828	27-Feb	24-Mar	02-Apr	6	1.7	1.1
SC1829						
SC1830	25-Feb	29-Mar	04-Apr	7	1.4	0.9
SC1831	25-Feb	28-Mar	03-Apr	8	1.6	1.1
SC1832	26-Feb	29-Mar	07-Apr	7	1.4	0.8
SC1833	25-Feb	29-Mar	06-Apr	7	1.5	1
SC1834	27-Feb	02-Apr	10-Apr	8	2	1.4
SC1835	25-Feb	29-Mar	04-Apr	8	1.4	0.9
SC1836	24-Feb	27-Mar	02-Apr	8	1.8	1.3
SC1839	23-Feb	29-Mar	05-Apr	6	1.9	1.4
SC1840	27-Feb	30-Mar	08-Apr	8	1.6	1.1
SC1838	25-Feb	28-Mar	05-Apr	11	2.6	2
SC1837	27-Feb	30-Mar	07-Apr	8	2	1.4
SC1852	27-Feb	05-Apr	10-Apr	6	1.8	1.1
SC1857	27-Feb	31-Mar	06-Apr	7	1.7	1.1

SC1858	27-Feb	04-Apr	10-Apr	7	1.8	1.5
SC1860	27-Feb	17-Apr		7	1.8	1.1
SC1861	27-Feb	12-Apr	18-Apr	8	1.1	1.7
SC1862	27-Feb	12-Apr	18-Apr	8	1.7	0.8
SC1865	27-Feb	05-Apr	13-Apr	6	1.3	1.5
SC1866	27-Feb	30-Mar	05-Apr	7	1.8	1
SC1867	27-Feb	31-Mar	06-Apr	7	1.3	0.8
SC1868	27-Feb	05-Apr	19-Apr	8	1.4	1.1
SC1869	01-Mar	05-Apr	13-Apr	6	1.1	1
SC1870	27-Feb	30-Mar	06-Apr	7	1.4	1.9
SC1871	02-Mar	03-Apr	10-Apr	7	1.1	1.9
SC1873	27-Feb	03-Apr	09-Apr	7	1.5	1.2
SC1874	27-Feb	01-Apr	08-Apr	7	1.7	1.2
SC1875	01-Mar	06-Apr	12-Apr	6	1.7	1.4
SC1877	27-Feb	30-Mar	03-Apr	7	1.7	1.5
SC1879	27-Feb			9	2	1.4
SC1900	27-Feb	18-Apr		9	1	1.5
SC1901	01-Mar	15-Apr	21-Apr	9	0.9	1.3
SC1910	25-Feb	16-Apr		7	2.3	1.5
SC1912	27-Feb	16-Apr	20-Apr	7	1.9	1.2
SC1841	27-Feb	03-Apr	11-Apr	8	1.4	0.7
SC1842	27-Feb	04-Apr	14-Apr	8	0.8	1.2
SC1843	26-Feb	04-Apr	14-Apr	8	2	1.1
SC1844	26-Feb	06-Apr	16-Apr	8	1.8	1.1
SC1845	26-Feb	04-Apr	08-Apr	8	1.5	1.3
SC1846	26-Feb	16-Apr	21-Apr	8	2.1	1.5
SC1847	26-Feb	02-Apr	15-Apr	8	1.4	1.1

SC1848	27-Feb	16-Apr	21-Apr	8	1.8	1.1
SC1849	27-Feb			8	1.9	1.2
SC1850	27-Feb	30-Mar	06-Apr	8	1.5	1.1
SC1851	27-Feb	29-Mar	05-Apr	8	1.1	1
SC1853	27-Feb	03-Apr	10-Apr	8	1.5	1.2
SC1854	27-Feb	30-Mar	06-Apr	8	1.1	0.8
SC1855	01-Mar			6	1	0.6
SC1856	27-Feb	02-Apr	10-Apr	8	1.6	1.4
SC1859	02-Mar					
SC1863	27-Feb	12-Apr	18-Apr	8	1.4	0.9
SC1864	27-Feb	29-Mar	06-Apr	6	2	1.4
SC1872	27-Feb	09-Apr	15-Apr	8	1.3	0.9
SC1876	27-Feb	20-Apr		8	1.1	1.5
SC1887	27-Feb	21-Apr		8	1	1.5
SC1889	01-Mar			8	1.6	1.2
SC1902	25-Feb	09-Apr	16-Apr	8	1.5	1.9
SC1903	25-Feb	14-Apr		8	1.5	2

Chapter 5: Primary data

ID	rep	type	Gen	Pot #	Germ	drought	Flower	Wilt	Height	Fruit number
1342 dC2	a	control1	GEN 0	1897	10-Jun	25-Jun	02-Jul	h	35	117
1342 dC2	b	control1	GEN 0	461	08-Jun	25-Jun	02-Jul	h	36.5	159
1342 dC2	c	control1	GEN 0	1835	08-Jun	25-Jun	02-Jul	h	36	168
1374 aC2	a	control1	GEN 0	1196	08-Jun	25-Jun	02-Jul	h	30	107
1374 aC2	b	control1	GEN 0	202	10-Jun	25-Jun	02-Jul	h	30	165
1374 aC2	c	control1	GEN 0	1281	10-Jun	25-Jun	02-Jul	h	31	126
1374 cC2	a	control1	GEN 0	1633	10-Jun	25-Jun	02-Jul	h	42	204
1374 cC2	b	control1	GEN 0	746	10-Jun	25-Jun	02-Jul	h	41	137
1374 cC2	c	control1	GEN 0	319	08-Jun	25-Jun	27-Jun	h	43	104
1381 bC2	a	control1	GEN 0	2062	11-Jun	25-Jun	06-Jul	h	31	203
1381 bC2	b	control1	GEN 0	36	11-Jun	25-Jun	06-Jul	h	31	189
1381 bC2	c	control1	GEN 0	1543	11-Jun	25-Jun	08-Jul	h	30	209
1381 cC2	a	control1	GEN 0	808	11-Jun	25-Jun	08-Jul	02-Jul	24	98
1381 cC2	b	control1	GEN 0	1639	11-Jun	25-Jun	08-Jul	h	39	134
1381 cC2	c	control1	GEN 0	1752	11-Jun	25-Jun	09-Jul	h	44	145
1382 cC2	a	control1	GEN 0	62	11-Jun	25-Jun	05-Jul	03-Jul	32	97
1382 cC2	b	control1	GEN 0	1774	11-Jun	25-Jun	06-Jul	h	32	147
1382 cC2	c	control1	GEN 0	1854	11-Jun	25-Jun	02-Jul	h	33	171
1382 dC2	a	control1	GEN 0	563	08-Jun	25-Jun	02-Jul	h	38.5	169
1382 dC2	b	control1	GEN 0	1454	10-Jun	25-Jun	02-Jul	h	43.5	138
1382 dC2	c	control1	GEN 0	1828	08-Jun	25-Jun	02-Jul	h	41	106
1385 aC2	a	control1	GEN 0	1679	11-Jun	25-Jun	03-Jul	h	32	188
1385 aC2	b	control1	GEN 0	1146	11-Jun	25-Jun	03-Jul	h	33	171
1385 aC2	c	control1	GEN 0	549	11-Jun	25-Jun	03-Jul	h	35	155
1385 bC2	a	control1	GEN 0	1127	11-Jun	25-Jun	08-Jul	h	35	131
1385 bC2	b	control1	GEN 0	2068	11-Jun	25-Jun	08-Jul	h	35	199
1385 bC2	c	control1	GEN 0	681	11-Jun	25-Jun	08-Jul	h	34	178
1385 dC2	a	control1	GEN 0	142	10-Jun	25-Jun	08-Jul	h	35	210
1385 dC2	b	control1	GEN 0	470	10-Jun	25-Jun	09-Jul	h	42	101

1385 dC2 c	control1	GEN 0	620		10-Jun	25-Jun	08-Jul	h	44	194
1387 bC2 a	control1	GEN 0	688		10-Jun	25-Jun	04-Jul	h	26	171
1387 bC2 b	control1	GEN 0	1499		10-Jun	25-Jun	05-Jul	h	42	122
1387 bC2 c	control1	GEN 0	1527		10-Jun	25-Jun	27-Jun	h	31	186
1387 cC2 a	control1	GEN 0	60		10-Jun	25-Jun	27-Jun	02-Jul	17.5	191
1387 cC2 b	control1	GEN 0	1236		11-Jun	25-Jun	27-Jun	02-Jul	54	156
1387 cC2 c	control1	GEN 0	1735		11-Jun	25-Jun	27-Jun	02-Jul	19.5	150
1388 aC2 a	control1	GEN 0	55		11-Jun	25-Jun	27-Jun	03-Jul	30	102
1388 aC2 b	control1	GEN 0	587		10-Jun	25-Jun	28-Jun	03-Jul	39	149
1388 aC2 c	control1	GEN 0	930		11-Jun	25-Jun	28-Jun	01-Jul	61	189
1388 bC2 a	control1	GEN 0	905		11-Jun	25-Jun	02-Jul	03-Jul	56	103
1388 bC2 b	control1	GEN 0	1988		11-Jun	25-Jun	28-Jun	01-Jul	32	122
1388 bC2 c	control1	GEN 0	1351		NG	25-Jun		h		
1389 bC2 a	control1	GEN 0	618		11-Jun	25-Jun	28-Jun	03-Jul	42	107
1389 bC2 b	control1	GEN 0	2063		11-Jun	25-Jun	28-Jun	h	55	97
1389 bC2 c	control1	GEN 0	2054		11-Jun	25-Jun	03-Jul	03-Jul	33	159
1389 cC2 a	control1	GEN 0	2095		10-Jun	25-Jun	03-Jul	03-Jul	43	214
1389 cC2 b	control1	GEN 0	1280		10-Jun	25-Jun	06-Jul	03-Jul	44	197
1389 cC2 c	control1	GEN 0	1039		10-Jun	25-Jun	03-Jul	03-Jul	41	145
1389aC2 a	control1	GEN 0	1951		12-Jun	25-Jun	03-Jul	h	69	106
1389aC2 b	control1	GEN 0	775		11-Jun	25-Jun	04-Jul	h	40	194
1389aC2 c	control1	GEN 0	1040		11-Jun	25-Jun	04-Jul	02-Jul	26	144
1390 bC2 a	control1	GEN 0	865		11-Jun	25-Jun	04-Jul	h	37	213
1390 bC2 b	control1	GEN 0	1530		11-Jun	25-Jun	04-Jul	02-Jul	53	126
1390 bC2 c	control1	GEN 0	511		11-Jun	25-Jun	04-Jul	03-Jul	50	146
1390 cC2 a	control1	GEN 0	531		11-Jun	25-Jun	08-Jul	03-Jul	27	150
1390 cC2 b	control1	GEN 0	175		11-Jun	25-Jun	08-Jul	03-Jul	39	182
1390 cC2 c	control1	GEN 0	166		11-Jun	25-Jun	08-Jul	02-Jul	29	124
1390 dC2 a	control1	GEN 0	1237		10-Jun	25-Jun	08-Jul	03-Jul	60	188
1390 dC2 b	control1	GEN 0	1836		10-Jun	25-Jun	09-Jul	h	56	101
1390 dC2 c	control1	GEN 0	1268		10-Jun	25-Jun	28-Jun	h	55	212

1405 cC2 a	control1	GEN 0	889	10-Jun	25-Jun	28-Jun	h	22	221
1405 cC2 b	control1	GEN 0	808	10-Jun	25-Jun	28-Jun	h	65	169
1405 cC2 c	control1	GEN 0	386	10-Jun	25-Jun	28-Jun	h	39	228
1411 bC2 a	control1	GEN 0	819	11-Jun	25-Jun	28-Jun	h	63	120
1411 bC2 b	control1	GEN 0	830	11-Jun	25-Jun	28-Jun	h	43	206
1411 bC2 c	control1	GEN 0	1987	11-Jun	25-Jun	28-Jun	h	49	141
1411 dC2 a	control1	GEN 0	215	11-Jun	25-Jun	28-Jun	h	43	130
1411 dC2 b	control1	GEN 0	1728	11-Jun	25-Jun	28-Jun	h	40	148
1411 dC2 c	control1	GEN 0	1701	10-Jun	25-Jun	28-Jun	h	40	208
1419 aC2 a	control1	GEN 0	678	11-Jun	25-Jun	28-Jun	h	35	184
1419 aC2 b	control1	GEN 0	945	10-Jun	25-Jun	28-Jun	h	24	232
1419 aC2 c	control1	GEN 0	85	10-Jun	25-Jun	28-Jun	h	51	111
1419 dC2 a	control1	GEN 0	1758	11-Jun	25-Jun	28-Jun	h	60	184
1419 dC2 b	control1	GEN 0	245	10-Jun	25-Jun	28-Jun	h	57	184
1419 dC2 c	control1	GEN 0	1973	10-Jun	25-Jun	28-Jun	h	37	210
1341 cC3 a	control2	GEN 0	1420	10-Jun	25-Jun	28-Jun	h	57	229
1341 cC3 b	control2	GEN 0	1869	10-Jun	25-Jun	28-Jun	h	60	144
1341 cC3 c	control2	GEN 0	137	10-Jun	25-Jun	28-Jun	h	61	215
1359 dC3 a	control2	GEN 0	1905	10-Jun	25-Jun	28-Jun	h	69	169
1359 dC3 b	control2	GEN 0	1444	10-Jun	25-Jun	28-Jun	h	34	142
1359 dC3 c	control2	GEN 0	1399	10-Jun	25-Jun	28-Jun	h	67	223
1366 aC3 a	control2	GEN 0	263	10-Jun	25-Jun	28-Jun	h	46	98
1366 aC3 b	control2	GEN 0	2058	11-Jun	25-Jun	28-Jun	h	49	235
1366 aC3 c	control2	GEN 0	1409	10-Jun	25-Jun	28-Jun	h	42	231
1366 bC3 a	control2	GEN 0	566	10-Jun	25-Jun	28-Jun	h	33	213
1366 bC3 b	control2	GEN 0	323	10-Jun	25-Jun	28-Jun	h	67	125
1366 bC3 c	control2	GEN 0	1476	10-Jun	25-Jun	28-Jun	h	60	227
1366 dC3 a	control2	GEN 0	1702	10-Jun	25-Jun	28-Jun	h	51	134
1366 dC3 b	control2	GEN 0	1096	10-Jun	25-Jun	28-Jun	h	61	220
1366 dC3 c	control2	GEN 0	1182	10-Jun	25-Jun	28-Jun	h	30	204
1368 aC3 a	control2	GEN 0	1255	10-Jun	25-Jun	28-Jun	h	52	222

1368 aC3 b	control2	GEN 0	1819	10-Jun	25-Jun	28-Jun	h	68	172
1368 aC3 c	control2	GEN 0	77	10-Jun	25-Jun	28-Jun	h	59	210
1370 bC3 a	control2	GEN 0	1340	10-Jun	25-Jun	28-Jun	h	63	128
1370 bC3 b	control2	GEN 0	266	10-Jun	25-Jun	28-Jun	h	40	164
1370 bC3 c	control2	GEN 0	1759	10-Jun	25-Jun	28-Jun	h	69	230
1371 bC3 a	control2	GEN 0	974	10-Jun	25-Jun	28-Jun	h	56	98
1371 bC3 b	control2	GEN 0	769	10-Jun	25-Jun	28-Jun	h	38	132
1371 bC3 c	control2	GEN 0	384	10-Jun	25-Jun	28-Jun	h	45	152
1371 dC3 a	control2	GEN 0	1458	10-Jun	25-Jun	28-Jun	h	68	229
1371 dC3 b	control2	GEN 0	1224	10-Jun	25-Jun	09-Jul	h	50	230
1371 dC3 c	control2	GEN 0	1524	10-Jun	25-Jun	09-Jul	h	36	117
1372 aC3 a	control2	GEN 0	1242	10-Jun	25-Jun	09-Jul	h	29	187
1372 aC3 b	control2	GEN 0	918	10-Jun	25-Jun	09-Jul	h	22	171
1372 aC3 c	control2	GEN 0	148	11-Jun	25-Jun	09-Jul	h	36	191
1372 cC3 a	control2	GEN 0	799	10-Jun	25-Jun	09-Jul	h	62	209
1372 cC3 b	control2	GEN 0	187	10-Jun	25-Jun	03-Jul	h	23	236
1372 cC3 c	control2	GEN 0	997	10-Jun	25-Jun	04-Jul	h	32	130
1377 aC3 a	control2	GEN 0	717	10-Jun	25-Jun	05-Jul	h	31	123
1377 aC3 b	control2	GEN 0	1404	10-Jun	25-Jun	02-Jul	02-Jul	49	238
1377 aC3 c	control2	GEN 0	1031	10-Jun	25-Jun	NO	02-Jul	31	144
1377 bC3 a	control2	GEN 0	1458	10-Jun	25-Jun	01-Jul	h	23	232
1377 bC3 b	control2	GEN 0	1679	10-Jun	25-Jun	01-Jul	03-Jul	33	191
1377 bC3 c	control2	GEN 0	905	11-Jun	25-Jun	01-Jul	h	22	154
1378 aC3 a	control2	GEN 0	1066	10-Jun	25-Jun	01-Jul	03-Jul	39	205
1378 aC3 b	control2	GEN 0	1779	ng	25-Jun		h		
1378 aC3 c	control2	GEN 0	105	10-Jun	25-Jun	01-Jul	h	31	107
1378 dC3 a	control2	GEN 0	190	10-Jun	25-Jun	04-Jul	h	26	111
1378 dC3 b	control2	GEN 0	1843	10-Jun	25-Jun	04-Jul	h	59	174
1378 dC3 c	control2	GEN 0	2086	10-Jun	25-Jun	04-Jul	h	33	183
1383 aC3 a	control2	GEN 0	879	10-Jun	25-Jun	04-Jul	h	36	122
1383 aC3 b	control2	GEN 0	421	10-Jun	25-Jun	04-Jul	h	43	118

1383 aC3	c	control2	GEN 0	890		10-Jun	25-Jun	04-Jul	h	40	177
1383 cC3	a	control2	GEN 0	1174		10-Jun	25-Jun	04-Jul	h	54	193
1383 cC3	b	control2	GEN 0	136		10-Jun	25-Jun	04-Jul	h	48	236
1383 cC3	c	control2	GEN 0	707		10-Jun	25-Jun	04-Jul	h	29	149
1391 dC3	a	control2	GEN 0	703		11-Jun	25-Jun	04-Jul	h	38	211
1391 dC3	b	control2	GEN 0	1408		10-Jun	25-Jun	04-Jul	h	55	100
1391 dC3	c	control2	GEN 0	1988		10-Jun	25-Jun	04-Jul	h	45	166
1397 aC3	a	control2	GEN 0	1963		10-Jun	25-Jun	04-Jul	h	63	139
1397 aC3	b	control2	GEN 0	1110		10-Jun	25-Jun	04-Jul	h	59	231
1397 aC3	c	control2	GEN 0	17		10-Jun	25-Jun	04-Jul	h	58	96
1397 cC3	a	control2	GEN 0	1734		10-Jun	25-Jun	04-Jul	h	34	128
1397 cC3	b	control2	GEN 0	255		10-Jun	25-Jun	04-Jul	01-Jul	39	158
1397 cC3	c	control2	GEN 0	2082		10-Jun	25-Jun	04-Jul	03-Jul	41	132
1401 cC3	a	control2	GEN 0	921		11-Jun	25-Jun	04-Jul	h	59	209
1401 cC3	b	control2	GEN 0	1045		10-Jun	25-Jun	04-Jul	h	38	128
1401 cC3	c	control2	GEN 0	1074		11-Jun	25-Jun	11-Jul	h	41	98
1401 dC3	a	control2	GEN 0	350		10-Jun	25-Jun	11-Jul	h	61	217
1401 dC3	b	control2	GEN 0	833		11-Jun	25-Jun	11-Jul	h	52	168
1401 dC3	c	control2	GEN 0	1186		10-Jun	25-Jun	11-Jul	h	33	189
1403 aC3	a	control2	GEN 0	890		10-Jun	25-Jun	NO	01-Jul	20	
1403 aC3	b	control2	GEN 0	878		10-Jun	25-Jun	12-Jul	h	22	222
1403 aC3	c	control2	GEN 0	1999		11-Jun	25-Jun	12-Jul	h	24	96
1403 bC3	a	control2	GEN 0	1230		13-Jun	25-Jun	15-Jul	h	66	190
1403 bC3	b	control2	GEN 0	611		10-Jun	25-Jun	NO	02-Jul	30	
1403 bC3	c	control2	GEN 0	457		10-Jun	25-Jun	12-Jul	h	30	238
1421 aC3	a	control2	GEN 0	2037		10-Jun	25-Jun	15-Jul	h	29	108
1421 aC3	b	control2	GEN 0	288		10-Jun	25-Jun	15-Jul	02-Jul	39	231
1421 aC3	c	control2	GEN 0	1358		11-Jun	25-Jun	16-Jul	h	59	222
SC1841	a	cxc1	GEN 0	866		07-Jun	25-Jun	28-Jun	h	34	163
SC1841	b	cxc1	GEN 0	915		08-Jun	25-Jun	27-Jun	01-Jul	26	215
SC1841	c	cxc1	GEN 0	1725		08-Jun	25-Jun	27-Jun	02-Jul	20	204

SC1842	a	cxc1	GEN 0	2069		07-Jun	25-Jun	27-Jun	02-Jul	62	133
SC1842	b	cxc1	GEN 0	953		09-Jun	25-Jun	27-Jun	01-Jul	12	235
SC1842	c	cxc1	GEN 0	1944		07-Jun	25-Jun	27-Jun	02-Jul	29	124
SC1843	a	cxc1	GEN 0	521		08-Jun	25-Jun	27-Jun	h	15	125
SC1843	b	cxc1	GEN 0	653		08-Jun	25-Jun	27-Jun	h	27	142
SC1843	c	cxc1	GEN 0	778		07-Jun	25-Jun	28-Jun	02-Jul	26	155
SC1844	a	cxc1	GEN 0	1676		07-Jun	25-Jun	28-Jun	02-Jul	43	140
SC1844	b	cxc1	GEN 0	1376		07-Jun	25-Jun	28-Jun	h	48	184
SC1844	c	cxc1	GEN 0	415		07-Jun	25-Jun	28-Jun	02-Jul	40	234
SC1845	a	cxc1	GEN 0	409		07-Jun	25-Jun	28-Jun	02-Jul	19	96
SC1845	b	cxc1	GEN 0	1738		07-Jun	25-Jun	28-Jun	02-Jul	17	173
SC1845	c	cxc1	GEN 0	76		07-Jun	25-Jun	28-Jun	01-Jul	25	116
SC1846	a	cxc1	GEN 0	52		07-Jun	25-Jun	28-Jun	h	29	106
SC1846	b	cxc1	GEN 0	1337		07-Jun	25-Jun	no	02-Jul	45	140
SC1846	c	cxc1	GEN 0	2062		07-Jun	25-Jun	no	02-Jul	42	171
SC1847	a	cxc1	GEN 0	327		07-Jun	25-Jun	28-Jun	02-Jul	57	140
SC1847	b	cxc1	GEN 0	258		07-Jun	25-Jun	28-Jun	02-Jul	27	132
SC1847	c	cxc1	GEN 0	1953		07-Jun	25-Jun	28-Jun	03-Jul	36	130
SC1848	a	cxc1	GEN 0	1945		07-Jun	25-Jun	27-Jun	02-Jul	32	96
SC1848	b	cxc1	GEN 0	339		07-Jun	25-Jun	27-Jun	02-Jul	29.5	125
SC1848	c	cxc1	GEN 0	1275		07-Jun	25-Jun	25-Jun	02-Jul	33	189
SC1849	a	cxc1	GEN 0	1417		10-Jun	25-Jun	30-Jun	h	26	171
SC1849	b	cxc1	GEN 0	793		10-Jun	25-Jun	26-Jun	01-Jul	61	157
SC1849	c	cxc1	GEN 0	53		08-Jun	25-Jun	25-Jun	02-Jul	30	136
SC1850	a	cxc1	GEN 0	1907		08-Jun	25-Jun	28-Jun	02-Jul	26	229
SC1850	b	cxc1	GEN 0	2096		08-Jun	25-Jun	25-Jun	02-Jul	41	186
SC1850	c	cxc1	GEN 0	593		08-Jun	25-Jun	25-Jun	02-Jul	29	170
SC1851	a	cxc1	GEN 0	599		08-Jun	25-Jun	25-Jun	02-Jul	32	109
SC1851	b	cxc1	GEN 0	1966		08-Jun	25-Jun	27-Jun	h	34	168
SC1851	c	cxc1	GEN 0	1124		08-Jun	25-Jun	27-Jun	02-Jul	26	197
SC1853	a	cxc1	GEN 0	1118		08-Jun	25-Jun	26-Jun	01-Jul	28	132

SC1853	b	cxc1	GEN 0	825	08-Jun	25-Jun	26-Jun	02-Jul	29	224
SC1853	c	cxc1	GEN 0	844	08-Jun	25-Jun	27-Jun	02-Jul	28	133
SC1854	a	cxc1	GEN 0	1792	07-Jun	25-Jun	26-Jun	02-Jul	29.5	106
SC1854	b	cxc1	GEN 0	701	07-Jun	25-Jun	26-Jun	02-Jul	34	177
SC1854	c	cxc1	GEN 0	975	07-Jun	25-Jun	26-Jun	01-Jul	28	153
SC1855	a	cxc1	GEN 0	1679	10-Jun	25-Jun	26-Jun	h	58	100
SC1855	b	cxc1	GEN 0	1660	10-Jun	25-Jun	26-Jun	h	47	214
SC1855	c	cxc1	GEN 0	38	10-Jun	25-Jun	26-Jun	h	65	127
SC1856	a	cxc1	GEN 0	751	10-Jun	25-Jun	01-Jul	03-Jul	30	224
SC1856	b	cxc1	GEN 0	491	07-Jun	25-Jun	02-Jul	h	38	154
SC1856	c	cxc1	GEN 0	1676	10-Jun	25-Jun	30-Jun	02-Jul	24.5	111
SC1859	a	cxc1	GEN 0	948	10-Jun	25-Jun	05-Jul	h	32	111
SC1859	b	cxc1	GEN 0	1152	10-Jun	25-Jun	08-Jul	h	69	112
SC1859	c	cxc1	GEN 0	589	10-Jun	25-Jun	04-Jul	03-Jul	29	122
SC1863	a	cxc1	GEN 0	1147	10-Jun	25-Jun	02-Jul	03-Jul	43	118
SC1863	b	cxc1	GEN 0	803	10-Jun	25-Jun	02-Jul	03-Jul	47	225
SC1863	c	cxc1	GEN 0	1950	10-Jun	25-Jun	27-Jun	h	28	231
SC1864	a	cxc1	GEN 0	1249	10-Jun	25-Jun	27-Jun	h	40	123
SC1864	b	cxc1	GEN 0	1608	10-Jun	25-Jun	27-Jun	02-Jul	35	129
SC1864	c	cxc1	GEN 0	1605	07-Jun	25-Jun	27-Jun	h	45	177
SC1872	a	cxc1	GEN 0	1011	10-Jun	25-Jun	27-Jun	02-Jul	25	230
SC1872	b	cxc1	GEN 0	1905	10-Jun	25-Jun	02-Jul	03-Jul	41	189
SC1872	c	cxc1	GEN 0	186	10-Jun	25-Jun	02-Jul	02-Jul	24	188
SC1876	a	cxc1	GEN 0	1713	10-Jun	25-Jun	03-Jul	02-Jul	56	158
SC1876	b	cxc1	GEN 0	1525	10-Jun	25-Jun	03-Jul	h	41	217
SC1876	c	cxc1	GEN 0	960	10-Jun	25-Jun	05-Jul	h	70	187
SC1887	a	cxc1	GEN 0	1633	10-Jun	25-Jun	05-Jul	h	50	149
SC1887	b	cxc1	GEN 0	1597	10-Jun	25-Jun	07-Jul	h	26	161
SC1887	c	cxc1	GEN 0	14	10-Jun	25-Jun	30-Jun	h	35	181
SC1889	a	cxc1	GEN 0	2004	10-Jun	25-Jun	no	02-Jul	61	
SC1889	b	cxc1	GEN 0	1434	10-Jun	25-Jun	30-Jun	h	40	154

SC1889	c	cxc1	GEN 0	352		10-Jun	25-Jun	04-Jul	h	40	203
SC1902	a	cxc1	GEN 0	559		10-Jun	25-Jun	30-Jun	h	58	172
SC1902	b	cxc1	GEN 0	764		10-Jun	25-Jun	30-Jun	h	35	138
SC1902	c	cxc1	GEN 0	1792		10-Jun	25-Jun	30-Jun	h	26	196
SC1903	a	cxc1	GEN 0	633		10-Jun	25-Jun	no	02-Jul	51	
SC1903	b	cxc1	GEN 0	2075		10-Jun	25-Jun	30-Jun	h	66	203
SC1903	c	cxc1	GEN 0	1328		10-Jun	25-Jun	30-Jun	h	39	185
SC1852	a	cxc2	GEN 0	1234		10-Jun	25-Jun	28-Jun	h	36.5	140
SC1852	b	cxc2	GEN 0	129		10-Jun	25-Jun	28-Jun	h	35	102
SC1852	c	cxc2	GEN 0	1478		10-Jun	25-Jun	30-Jun	h	37	187
SC1857	a	cxc2	GEN 0	881		10-Jun	25-Jun	30-Jun	h	27	208
SC1857	b	cxc2	GEN 0	506		10-Jun	25-Jun	28-Jun	h	16	95
SC1857	c	cxc2	GEN 0	1207		10-Jun	25-Jun	27-Jun	02-Jul	26	140
SC1858	a	cxc2	GEN 0	775		07-Jun	25-Jun	no	02-Jul	64	134
SC1858	b	cxc2	GEN 0	1502		10-Jun	25-Jun	27-Jun	h	38.5	178
SC1858	c	cxc2	GEN 0	157		10-Jun	25-Jun	dead	h	57	
SC1860	a	cxc2	GEN 0	672		07-Jun	25-Jun	27-Jun	02-Jul	47	121
SC1860	b	cxc2	GEN 0	922		07-Jun	25-Jun	no	01-Jul	54	136
SC1860	c	cxc2	GEN 0	1720		07-Jun	25-Jun	28-Jun	h	26	205
SC1861	a	cxc2	GEN 0	1487		07-Jun	25-Jun	28-Jun	h	49	175
SC1861	b	cxc2	GEN 0	170		07-Jun	25-Jun	06-Jul	h	37	135
SC1861	c	cxc2	GEN 0	1794		07-Jun	25-Jun	28-Jun	02-Jul	13	231
SC1862	a	cxc2	GEN 0	1776		07-Jun	25-Jun	28-Jun	03-Jul	36	118
SC1862	b	cxc2	GEN 0	335		07-Jun	25-Jun	30-Jun	01-Jul	33	132
SC1862	c	cxc2	GEN 0	1764		07-Jun	25-Jun	30-Jun	02-Jul	29	205
SC1865	a	cxc2	GEN 0	1065		07-Jun	25-Jun	no	01-Jul	62	121
SC1865	b	cxc2	GEN 0	1633		07-Jun	25-Jun	30-Jun	02-Jul	45	205
SC1865	c	cxc2	GEN 0	383		07-Jun	25-Jun	30-Jun	h	46	124
SC1866	a	cxc2	GEN 0	1913		07-Jun	25-Jun	no	01-Jul	26	187
SC1866	b	cxc2	GEN 0	1118		07-Jun	25-Jun	no	01-Jul	25	213
SC1866	c	cxc2	GEN 0	460		07-Jun	25-Jun	30-Jun	01-Jul	39	141

SC1867	a	cxc2	GEN 0	74		07-Jun	25-Jun	28-Jun	02-Jul	26	152
SC1867	b	cxc2	GEN 0	1195		07-Jun	25-Jun	26-Jun	01-Jul	57	225
SC1867	c	cxc2	GEN 0	1093		07-Jun	25-Jun	26-Jun	01-Jul	43	166
SC1868	a	cxc2	GEN 0	1360		07-Jun	25-Jun	28-Jun	01-Jul	33	158
SC1868	b	cxc2	GEN 0	559		07-Jun	25-Jun	28-Jun	03-Jul	32	209
SC1868	c	cxc2	GEN 0	1148		07-Jun	25-Jun	28-Jun	h	33	113
SC1869	a	cxc2	GEN 0	1429		07-Jun	25-Jun	30-Jun	03-Jul	27	140
SC1869	b	cxc2	GEN 0	387		07-Jun	25-Jun	no	01-Jul	22	
SC1869	c	cxc2	GEN 0	1472		07-Jun	25-Jun	02-Jul	h	40	179
SC1870	a	cxc2	GEN 0	332		07-Jun	25-Jun	26-Jun	03-Jul	28.5	238
SC1870	b	cxc2	GEN 0	813		07-Jun	25-Jun	26-Jun	02-Jul	28	181
SC1870	c	cxc2	GEN 0	1092		07-Jun	25-Jun	27-Jun	02-Jul	35	171
SC1871	a	cxc2	GEN 0	326		07-Jun	25-Jun	28-Jun	02-Jul	32	97
SC1871	b	cxc2	GEN 0	1913		07-Jun	25-Jun	26-Jun	02-Jul	21	226
SC1871	c	cxc2	GEN 0	744		07-Jun	25-Jun	26-Jun	01-Jul	32	114
SC1873	a	cxc2	GEN 0	1638		07-Jun	25-Jun	27-Jun	02-Jul	30	195
SC1873	b	cxc2	GEN 0	559		07-Jun	25-Jun	28-Jun	02-Jul	35	119
SC1873	c	cxc2	GEN 0	741		07-Jun	25-Jun	28-Jun	02-Jul	30	154
SC1874	a	cxc2	GEN 0	22		07-Jun	25-Jun	28-Jun	03-Jul	33	234
SC1874	b	cxc2	GEN 0	937		07-Jun	25-Jun	28-Jun	h	35	128
SC1874	c	cxc2	GEN 0	680		07-Jun	25-Jun	28-Jun	03-Jul	20.5	167
SC1875	a	cxc2	GEN 0	474		07-Jun	25-Jun	dead	h	68	
SC1875	b	cxc2	GEN 0	399		07-Jun	25-Jun	29-Jun	01-Jul	50	110
SC1875	c	cxc2	GEN 0	1936		07-Jun	25-Jun	30-Jun	01-Jul	51	227
SC1877	a	cxc2	GEN 0	339		07-Jun	25-Jun	24-Jun	03-Jul	32	176
SC1877	b	cxc2	GEN 0	1889		07-Jun	25-Jun	24-Jun	03-Jul	32	185
SC1877	c	cxc2	GEN 0	1940		07-Jun	25-Jun	25-Jun	02-Jul	46	196
SC1879	a	cxc2	GEN 0	1169		07-Jun	25-Jun	09-Jul	h	48	111
SC1879	b	cxc2	GEN 0	1845		07-Jun	25-Jun	02-Jul	01-Jul	39	185
SC1879	c	cxc2	GEN 0	383		07-Jun	25-Jun	01-Jul	01-Jul	34	215
SC1900	a	cxc2	GEN 0	1585		07-Jun	25-Jun	30-Jun	01-Jul	39	179

SC1900	b	cxc2	GEN 0	1220		07-Jun	25-Jun	30-Jun	01-Jul	53	142
SC1900	c	cxc2	GEN 0	1455		07-Jun	25-Jun	30-Jun	01-Jul	36	178
SC1901	a	cxc2	GEN 0	389		08-Jun	25-Jun	01-Jul	h	50	218
SC1901	b	cxc2	GEN 0	880		08-Jun	25-Jun	02-Jul	h	38	207
SC1901	c	cxc2	GEN 0	1367		08-Jun	25-Jun	01-Jul	h	54	172
SC1910	a	cxc2	GEN 0	1764		07-Jun	25-Jun	01-Jul	h	28	169
SC1910	b	cxc2	GEN 0	418		10-Jun	25-Jun	30-Jun	01-Jul	53	102
SC1910	c	cxc2	GEN 0	643		10-Jun	25-Jun	28-Jun	h	31	223
SC1912	a	cxc2	GEN 0	1391		07-Jun	25-Jun	28-Jun	h	35	108
SC1912	b	cxc2	GEN 0	834		08-Jun	25-Jun	29-Jun	h	69	158
SC1912	c	cxc2	GEN 0	1566		10-Jun	25-Jun	30-Jun	h	30	132
1292 bS3	a	spring 1	GEN 0	1124		10-Jun	25-Jun	27-Jun	h	39	128
1292 bS3	b	spring 1	GEN 0	1063		10-Jun	25-Jun	27-Jun	h	38	191
1292 bS3	c	spring 1	GEN 0	2042		10-Jun	25-Jun	27-Jun	h	31	154
1293 bS3	a	spring 1	GEN 0	991		10-Jun	25-Jun	27-Jun	h	67	141
1293 bS3	b	spring 1	GEN 0	790		10-Jun	25-Jun	27-Jun	h	39	96
1293 bS3	c	spring 1	GEN 0	815		10-Jun	25-Jun	27-Jun	h	38	120
1296 cS3	a	spring 1	GEN 0	1393		10-Jun	25-Jun	27-Jun	h	42	182
1296 cS3	b	spring 1	GEN 0	571		10-Jun	25-Jun	27-Jun	h	39	196
1296 cS3	c	spring 1	GEN 0	1602		10-Jun	25-Jun	27-Jun	h	37	236
1300 dS3	a	spring 1	GEN 0	251		10-Jun	25-Jun	27-Jun	h	39	142
1300 dS3	b	spring 1	GEN 0	291		10-Jun	25-Jun	27-Jun	h	38	212
1300 dS3	c	spring 1	GEN 0	339		10-Jun	25-Jun	27-Jun	h	38	126
1301 aS3	a	spring 1	GEN 0	1012		10-Jun	25-Jun	27-Jun	h	49	165
1301 aS3	b	spring 1	GEN 0	480		10-Jun	25-Jun	27-Jun	h	47	231
1301 aS3	c	spring 1	GEN 0	1262		10-Jun	25-Jun	27-Jun	h	40	137
1301 dS3	a	spring 1	GEN 0	129		10-Jun	25-Jun	27-Jun	h	37	190
1301 dS3	b	spring 1	GEN 0	1825		10-Jun	25-Jun	27-Jun	h	35	118
1301 dS3	c	spring 1	GEN 0	1765		10-Jun	25-Jun	27-Jun	h	34	100
1310 aS3	a	spring 1	GEN 0	530		10-Jun	25-Jun	27-Jun	03-Jul	35	95
1310 aS3	b	spring 1	GEN 0	1912		10-Jun	25-Jun	27-Jun	03-Jul	30	153

1310 aS3 c	spring 1	GEN 0	1530		10-Jun	25-Jun	27-Jun	02-Jul	30	110
1311 aS3 a	spring 1	GEN 0	1253		07-Jun	25-Jun	26-Jun	01-Jul	48	172
1311 aS3 b	spring 1	GEN 0	993		07-Jun	25-Jun	26-Jun	02-Jul	40	201
1311 aS3 c	spring 1	GEN 0	1006		10-Jun	25-Jun	27-Jun	02-Jul	29	215
1313 dS3 a	spring 1	GEN 0	1249		07-Jun	25-Jun	27-Jun	01-Jul	41	206
1313 dS3 b	spring 1	GEN 0	887		10-Jun	25-Jun	28-Jun	h	32	112
1313 dS3 c	spring 1	GEN 0	1054		07-Jun	25-Jun	27-Jun	01-Jul	30	182
1319 dS3 a	spring 1	GEN 0	1282		07-Jun	25-Jun	27-Jun	02-Jul	26.5	103
1319 dS3 b	spring 1	GEN 0	126		07-Jun	25-Jun	27-Jun	02-Jul	28.5	143
1319 dS3 c	spring 1	GEN 0	1486		07-Jun	25-Jun	27-Jun	02-Jul	29	205
1320 aS3 a	spring 1	GEN 0	917		10-Jun	25-Jun	27-Jun	02-Jul	23	177
1320 aS3 b	spring 1	GEN 0	56		10-Jun	25-Jun	26-Jun	03-Jul	34	107
1320 aS3 c	spring 1	GEN 0	1985		08-Jun	25-Jun	27-Jun	02-Jul	25	131
1325 dS3 a	spring 1	GEN 0	937		07-Jun	25-Jun	27-Jun	02-Jul	27.5	161
1325 dS3 b	spring 1	GEN 0	876		10-Jun	25-Jun	27-Jun	02-Jul	31	152
1325 dS3 c	spring 1	GEN 0	1145		10-Jun	25-Jun	28-Jun	02-Jul	34	183
1327 aS3 a	spring 1	GEN 0	820		08-Jun	25-Jun	26-Jun	h	32	167
1327 aS3 b	spring 1	GEN 0	98		10-Jun	25-Jun	27-Jun	h	26	128
1327 aS3 c	spring 1	GEN 0	142		10-Jun	25-Jun	25-Jun	h	39	205
1329 aS3 a	spring 1	GEN 0	2046		10-Jun	25-Jun	27-Jun	02-Jul	28	199
1329 aS3 b	spring 1	GEN 0	1595		10-Jun	25-Jun	01-Jul	h	33	202
1329 aS3 c	spring 1	GEN 0	936		08-Jun	25-Jun	28-Jun	02-Jul	21	185
1329 bS3 a	spring 1	GEN 0	1853		10-Jun	25-Jun	27-Jun	02-Jul	26.5	136
1329 bS3 b	spring 1	GEN 0	1972		08-Jun	25-Jun	27-Jun	02-Jul	31	112
1329 bS3 c	spring 1	GEN 0	609		08-Jun	25-Jun	27-Jun	02-Jul	31	99
1329 cS3 a	spring 1	GEN 0	560		08-Jun	25-Jun	26-Jun	02-Jul	25	102
1329 cS3 b	spring 1	GEN 0	447		08-Jun	25-Jun	26-Jun	02-Jul	23.5	222
1329 cS3 c	spring 1	GEN 0	95		08-Jun	25-Jun	26-Jun	02-Jul	29.5	152
1332 aS3 a	spring 1	GEN 0	1458		08-Jun	25-Jun	26-Jun	02-Jul	24	189
1332 aS3 b	spring 1	GEN 0	2029		08-Jun	25-Jun	27-Jun	02-Jul	32	102
1332 aS3 c	spring 1	GEN 0	2096		08-Jun	25-Jun	26-Jun	02-Jul	29.8	144

1332 cS3 a	spring 1	GEN 0	1755	08-Jun	25-Jun	27-Jun	02-Jul	23	107
1332 cS3 b	spring 1	GEN 0	824	08-Jun	25-Jun	27-Jun	02-Jul	32	203
1332 cS3 c	spring 1	GEN 0	968	08-Jun	25-Jun	25-Jun	02-Jul	28	177
1332 dS3 a	spring 1	GEN 0	1102	08-Jun	25-Jun	27-Jun	02-Jul	26	192
1332 dS3 b	spring 1	GEN 0	1407	08-Jun	25-Jun	27-Jun	h	30	111
1332 dS3 c	spring 1	GEN 0	1471	08-Jun	25-Jun	27-Jun	h	16	188
1333 bS3 a	spring 1	GEN 0	2045	08-Jun	25-Jun	26-Jun	02-Jul	30	161
1333 bS3 b	spring 1	GEN 0	2097	08-Jun	25-Jun	27-Jun	02-Jul	30	161
1333 bS3 c	spring 1	GEN 0	1837	08-Jun	25-Jun	26-Jun	h	37	116
1333 cS3 a	spring 1	GEN 0	487	08-Jun	25-Jun	26-Jun	02-Jul	30.1	234
1333 cS3 b	spring 1	GEN 0	1685	08-Jun	25-Jun	26-Jun	02-Jul	31	173
1333 cS3 c	spring 1	GEN 0	1115	08-Jun	25-Jun	26-Jun	02-Jul	32	174
1333 dS3 a	spring 1	GEN 0	2067	08-Jun	25-Jun	27-Jun	02-Jul	60	195
1333 dS3 b	spring 1	GEN 0	1350	08-Jun	25-Jun	25-Jun	02-Jul	64	202
1333 dS3 c	spring 1	GEN 0	1748	08-Jun	25-Jun	27-Jun	02-Jul	26.5	120
1336 bS3 a	spring 1	GEN 0	1674	08-Jun	25-Jun	27-Jun	h	31	176
1336 bS3 b	spring 1	GEN 0	1274	08-Jun	25-Jun	26-Jun	02-Jul	28	157
1336 bS3 c	spring 1	GEN 0	1184	08-Jun	25-Jun	27-Jun	02-Jul	25	230
1336 dS3 a	spring 1	GEN 0	632	07-Jun	25-Jun	26-Jun	02-Jul	24	102
1336 dS3 b	spring 1	GEN 0	551	07-Jun	25-Jun	26-Jun	02-Jul	29	229
1336 dS3 c	spring 1	GEN 0	488	07-Jun	25-Jun	26-Jun	02-Jul	25	141
1355 aS3 a	spring 1	GEN 0	1075	07-Jun	25-Jun	26-Jun	02-Jul	30	165
1355 aS3 b	spring 1	GEN 0	472	07-Jun	25-Jun	25-Jun	02-Jul	29	212
1355 aS3 c	spring 1	GEN 0	1723	07-Jun	25-Jun	26-Jun	02-Jul	26	142
1283 aS1 a	spring 2	GEN 0	1435	10-Jun	25-Jun	25-Jun	01-Jul	57	122
1283 aS1 b	spring 2	GEN 0	667	10-Jun	25-Jun	25-Jun	02-Jul	26	208
1283 aS1 c	spring 2	GEN 0	2097	10-Jun	25-Jun	25-Jun	01-Jul	31	103
1284 aS1 a	spring 2	GEN 0	1981	10-Jun	25-Jun	24-Jun	02-Jul	27	168
1284 aS1 b	spring 2	GEN 0	1541	08-Jun	25-Jun	25-Jun	h	31	125
1284 aS1 c	spring 2	GEN 0	754	08-Jun	25-Jun	25-Jun	h	22	216
1284 bS1 a	spring 2	GEN 0	1539	10-Jun	25-Jun	25-Jun	01-Jul	35	101

1284 bS1 b	spring 2	GEN 0	1588		10-Jun	25-Jun	24-Jun	02-Jul	29	188
1284 bS1 c	spring 2	GEN 0	864		10-Jun	25-Jun	26-Jun	02-Jul	19	172
1284 cS1 a	spring 2	GEN 0	1271		08-Jun	25-Jun	27-Jun	h	29	117
1284 cS1 b	spring 2	GEN 0	2050		08-Jun	25-Jun	25-Jun	02-Jul	25	200
1284 cS1 c	spring 2	GEN 0	1917		10-Jun	25-Jun	25-Jun	01-Jul	70	197
1285 dS1 a	spring 2	GEN 0	86		10-Jun	25-Jun	24-Jun	01-Jul	45	172
1285 dS1 b	spring 2	GEN 0	1036		10-Jun	25-Jun	25-Jun	h	32	191
1285 dS1 c	spring 2	GEN 0	1120		10-Jun	25-Jun	25-Jun	h	30	221
1286 aS1 a	spring 2	GEN 0	283		08-Jun	25-Jun	25-Jun	h	37	238
1286 aS1 b	spring 2	GEN 0	1053		08-Jun	25-Jun	25-Jun	h	38	229
1286 aS1 c	spring 2	GEN 0	2007		08-Jun	25-Jun	25-Jun	h	38	124
1286 dS1 a	spring 2	GEN 0	1106		10-Jun	25-Jun	25-Jun	01-Jul	37	109
1286 dS1 b	spring 2	GEN 0	885		10-Jun	25-Jun	27-Jun	02-Jul	35	175
1286 dS1 c	spring 2	GEN 0	1633		10-Jun	25-Jun	25-Jun	h	40	229
1288 aS1 a	spring 2	GEN 0	309		10-Jun	25-Jun	24-Jun	03-Jul	39.5	128
1288 aS1 b	spring 2	GEN 0	1292		10-Jun	25-Jun	24-Jun	h	33	138
1288 aS1 c	spring 2	GEN 0	2054		10-Jun	25-Jun	25-Jun	02-Jul	26	96
1288 bS1 a	spring 2	GEN 0	246		08-Jun	25-Jun	26-Jun	h	36	113
1288 bS1 b	spring 2	GEN 0	362		08-Jun	25-Jun	25-Jun	h	40	230
1288 bS1 c	spring 2	GEN 0	1403		08-Jun	25-Jun	26-Jun	h	40	235
1288 cS1 a	spring 2	GEN 0	401		08-Jun	25-Jun	24-Jun	02-Jul	38	222
1288 cS1 b	spring 2	GEN 0	1780		08-Jun	25-Jun	24-Jun	h	38	210
1288 cS1 c	spring 2	GEN 0	1069		08-Jun	25-Jun	24-Jun	h	42	148
1297 aS1 a	spring 2	GEN 0	1431		07-Jun	25-Jun	24-Jun	h	42	191
1297 aS1 b	spring 2	GEN 0	823		07-Jun	25-Jun	24-Jun	02-Jul	34	152
1297 aS1 c	spring 2	GEN 0	496		07-Jun	25-Jun	24-Jun	02-Jul	34	228
1297 dS1 a	spring 2	GEN 0	1551		08-Jun	25-Jun	24-Jun	h	34	143
1297 dS1 b	spring 2	GEN 0	2025		08-Jun	25-Jun	24-Jun	h	58	110
1297 dS1 c	spring 2	GEN 0	2001		08-Jun	25-Jun	26-Jun	h	49	223
1298 bS1 a	spring 2	GEN 0	585		10-Jun	25-Jun	24-Jun	h	26	230
1298 bS1 b	spring 2	GEN 0	887		08-Jun	25-Jun	25-Jun	02-Jul	36	95

1298 bS1 c	spring 2	GEN 0	1600	08-Jun	25-Jun	24-Jun	03-Jul	32	101
1304 aS1 a	spring 2	GEN 0	642	08-Jun	25-Jun	25-Jun	01-Jul	31	184
1304 aS1 b	spring 2	GEN 0	1901	08-Jun	25-Jun	25-Jun	h	67	126
1304 aS1 c	spring 2	GEN 0	1969	08-Jun	25-Jun	25-Jun	h	35	192
1304 dS1 a	spring 2	GEN 0	1830	08-Jun	25-Jun	25-Jun	h	34	167
1304 dS1 b	spring 2	GEN 0	395	08-Jun	25-Jun	24-Jun	02-Jul	33	153
1304 dS1 c	spring 2	GEN 0	143	08-Jun	25-Jun	25-Jun	h	31	219
1306 aS1 a	spring 2	GEN 0	2011	08-Jun	25-Jun	26-Jun	02-Jul	16	217
1306 aS1 b	spring 2	GEN 0	1459	10-Jun	25-Jun	27-Jun	03-Jul	24	111
1306 aS1 c	spring 2	GEN 0	1991	08-Jun	25-Jun	26-Jun	03-Jul	28	134
1306 bS1 a	spring 2	GEN 0	2085	08-Jun	25-Jun	25-Jun	h	31	208
1306 bS1 b	spring 2	GEN 0	671	08-Jun	25-Jun	25-Jun	02-Jul	21	106
1306 bS1 c	spring 2	GEN 0	40	08-Jun	25-Jun	26-Jun	03-Jul	25	168
1306 cS1 a	spring 2	GEN 0	1473	10-Jun	25-Jun	26-Jun	h	28	220
1306 cS1 b	spring 2	GEN 0	14	10-Jun	25-Jun	27-Jun	h	36	232
1306 cS1 c	spring 2	GEN 0	208	10-Jun	25-Jun	26-Jun	h	38	126
1306 dS1 a	spring 2	GEN 0	1308	08-Jun	25-Jun	26-Jun	h	36	176
1306 dS1 b	spring 2	GEN 0	1062	08-Jun	25-Jun	24-Jun	h	32	120
1306 dS1 c	spring 2	GEN 0	1522	08-Jun	25-Jun	25-Jun	h	32	140
1308 dS1 a	spring 2	GEN 0	635	08-Jun	25-Jun	25-Jun	02-Jul	58	129
1308 dS1 b	spring 2	GEN 0	1733	08-Jun	25-Jun	25-Jun	02-Jul	26	222
1308 dS1 c	spring 2	GEN 0	1431	08-Jun	25-Jun	24-Jun	h	29	207
1317 cS1 a	spring 2	GEN 0	592	08-Jun	25-Jun	27-Jun	h	32	211
1317 cS1 b	spring 2	GEN 0	1092	08-Jun	25-Jun	27-Jun	h	37	120
1317 cS1 c	spring 2	GEN 0	1529	08-Jun	25-Jun	24-Jun	h	36	131
1317 dS1 a	spring 2	GEN 0	1692	10-Jun	25-Jun	24-Jun	h	39	167
1317 dS1 b	spring 2	GEN 0	1934	07-Jun	25-Jun	26-Jun	h	38	192
1317 dS1 c	spring 2	GEN 0	1222	08-Jun	25-Jun	26-Jun	h	38	195
1318 aS1 a	spring 2	GEN 0	1645	10-Jun	25-Jun	25-Jun	h	45	122
1318 aS1 b	spring 2	GEN 0	865	07-Jun	25-Jun	24-Jun	h	35	165
1318 aS1 c	spring 2	GEN 0	1828	08-Jun	25-Jun	26-Jun	h	26	165

1318 bS1	a	spring 2	GEN 0	37		08-Jun	25-Jun	26-Jun	h	42	95
1318 bS1	b	spring 2	GEN 0	1066		08-Jun	25-Jun	26-Jun	h	49	175
1318 bS1	c	spring 2	GEN 0	124		08-Jun	25-Jun	24-Jun	h	32	129
1318 cS1	a	spring 2	GEN 0	1508		08-Jun	25-Jun	26-Jun	03-Jul	40	173
1318 cS1	b	spring 2	GEN 0	1747		10-Jun	25-Jun	26-Jun	h	40	125
1318 cS1	c	spring 2	GEN 0	1331		08-Jun	25-Jun	25-Jun	h	39	109
SC1595	a	sxs1	GEN 0	24		07-Jun	25-Jun	24-Jun	01-Jul	57	117
SC1595	b	sxs1	GEN 0	1392		07-Jun	25-Jun	24-Jun	01-Jul	10	235
SC1595	c	sxs1	GEN 0	1538		07-Jun	25-Jun	24-Jun	02-Jul	58	174
SC1597	a	sxs1	GEN 0	1809		07-Jun	25-Jun	24-Jun	02-Jul	57	57
SC1597	b	sxs1	GEN 0	1380		07-Jun	25-Jun	25-Jun	01-Jul	70	145
SC1597	c	sxs1	GEN 0	465		07-Jun	25-Jun	24-Jun	01-Jul	28.5	131
SC1598	a	sxs1	GEN 0	1434		07-Jun	25-Jun	24-Jun	h	42	154
SC1598	b	sxs1	GEN 0	1958		07-Jun	25-Jun	26-Jun	02-Jul	36	174
SC1598	c	sxs1	GEN 0	450		07-Jun	25-Jun	27-Jun	02-Jul	38	121
SC1599	a	sxs1	GEN 0	763		07-Jun	25-Jun	24-Jun	01-Jul	49	150
SC1599	b	sxs1	GEN 0	1802		07-Jun	25-Jun	24-Jun	02-Jul	38	181
SC1599	c	sxs1	GEN 0	1480		07-Jun	25-Jun	25-Jun	02-Jul	30	110
SC1601	a	sxs1	GEN 0	121		07-Jun	25-Jun	26-Jun	h	22	126
SC1601	b	sxs1	GEN 0	970		07-Jun	25-Jun	25-Jun	02-Jul	35	188
SC1601	c	sxs1	GEN 0	1009		07-Jun	25-Jun	24-Jun	02-Jul	28	71
SC1602	a	sxs1	GEN 0	1320		07-Jun	25-Jun	25-Jun	02-Jul	38	118
SC1602	b	sxs1	GEN 0	1947		07-Jun	25-Jun	26-Jun	h	47	214
SC1602	c	sxs1	GEN 0	20		07-Jun	25-Jun	24-Jun	02-Jul	35	94
SC1603	a	sxs1	GEN 0	1515		07-Jun	25-Jun	27-Jun	03-Jul	34.5	127
SC1603	b	sxs1	GEN 0	1870		07-Jun	25-Jun	24-Jun	02-Jul	21	111
SC1603	c	sxs1	GEN 0	1358		07-Jun	25-Jun	24-Jun	02-Jul	36	136
SC1605	a	sxs1	GEN 0	424		07-Jun	25-Jun	24-Jun	02-Jul	35	72
SC1605	b	sxs1	GEN 0	1331		07-Jun	25-Jun	24-Jun	02-Jul	34	61
SC1605	c	sxs1	GEN 0	1315		07-Jun	25-Jun	24-Jun	02-Jul	27	56
SC1606	a	sxs1	GEN 0	987		07-Jun	25-Jun	24-Jun	03-Jul	32.5	121

SC1606	b	sxs1	GEN 0	1190		07-Jun	25-Jun	24-Jun	03-Jul	38	144
SC1606	c	sxs1	GEN 0	2010		07-Jun	25-Jun	24-Jun	03-Jul	37.5	127
SC1607	a	sxs1	GEN 0	606		07-Jun	25-Jun	25-Jun	03-Jul	35	152
SC1607	b	sxs1	GEN 0	565		07-Jun	25-Jun	24-Jun	03-Jul	37	157
SC1607	c	sxs1	GEN 0	833		07-Jun	25-Jun	22-Jun	03-Jul	36	163
SC1608	a	sxs1	GEN 0	1599		07-Jun	25-Jun	24-Jun	03-Jul	34	181
SC1608	b	sxs1	GEN 0	174		07-Jun	25-Jun	24-Jun	03-Jul	50.5	261
SC1608	c	sxs1	GEN 0	1044		07-Jun	25-Jun	25-Jun	03-Jul	36	123
SC1609	a	sxs1	GEN 0	136		07-Jun	25-Jun	25-Jun	03-Jul	44	161
SC1609	b	sxs1	GEN 0	1200		07-Jun	25-Jun	25-Jun	03-Jul	49	168
SC1609	c	sxs1	GEN 0	936		07-Jun	25-Jun	25-Jun	03-Jul	45	172
SC1611	a	sxs1	GEN 0	584		07-Jun	25-Jun	24-Jun	03-Jul	36	144
SC1611	b	sxs1	GEN 0	1106		07-Jun	25-Jun	25-Jun	03-Jul	38	196
SC1611	c	sxs1	GEN 0	1792		07-Jun	25-Jun	26-Jun	03-Jul	35	198
SC1613	a	sxs1	GEN 0	518		07-Jun	25-Jun	27-Jun	02-Jul	30	129
SC1613	b	sxs1	GEN 0	767		07-Jun	25-Jun	26-Jun	h	26	152
SC1613	c	sxs1	GEN 0	1821		07-Jun	25-Jun	27-Jun	02-Jul	15	149
SC1616	a	sxs1	GEN 0	1582		07-Jun	25-Jun	26-Jun	02-Jul	22	136
SC1616	b	sxs1	GEN 0	955		07-Jun	25-Jun	25-Jun	01-Jul	42	204
SC1616	c	sxs1	GEN 0	873		07-Jun	25-Jun	25-Jun	h	39	189
SC1617	a	sxs1	GEN 0	1140		07-Jun	25-Jun	25-Jun	03-Jul	39	164
SC1617	b	sxs1	GEN 0	1354		07-Jun	25-Jun	27-Jun	03-Jul	40	167
SC1617	c	sxs1	GEN 0	484		07-Jun	25-Jun	25-Jun	03-Jul	40	174
SC1618	a	sxs1	GEN 0	1031		07-Jun	25-Jun	26-Jun	02-Jul	30	129
SC1618	b	sxs1	GEN 0	272		07-Jun	25-Jun	24-Jun	02-Jul	32	127
SC1618	c	sxs1	GEN 0	1107		07-Jun	25-Jun	24-Jun	02-Jul	31	118
SC1619	a	sxs1	GEN 0	1915		07-Jun	25-Jun	24-Jun	02-Jul	32	123
SC1619	b	sxs1	GEN 0	518		07-Jun	25-Jun	26-Jun	02-Jul	32	135
SC1619	c	sxs1	GEN 0	2074		07-Jun	25-Jun	27-Jun	02-Jul	32	126
SC1620	a	sxs1	GEN 0	218		10-Jun	25-Jun	27-Jun	h	41	152
SC1620	b	sxs1	GEN 0	977		07-Jun	25-Jun	25-Jun	02-Jul	36	143

SC1620	c	sxs1	GEN 0	1012		07-Jun	25-Jun	24-Jun	02-Jul	21	135
SC1621	a	sxs1	GEN 0	1657		07-Jun	25-Jun	26-Jun	02-Jul	25	113
SC1621	b	sxs1	GEN 0	821		07-Jun	25-Jun	26-Jun	03-Jul	28	106
SC1621	c	sxs1	GEN 0	1859		07-Jun	25-Jun	26-Jun	03-Jul	23.5	98
SC1622	a	sxs1	GEN 0	1372		07-Jun	25-Jun	24-Jun	01-Jul	62	108
SC1622	b	sxs1	GEN 0	484		07-Jun	25-Jun	24-Jun	02-Jul	20	99
SC1622	c	sxs1	GEN 0	1030		07-Jun	25-Jun	24-Jun	02-Jul	35	115
SC1623	a	sxs1	GEN 0	1000		07-Jun	25-Jun	25-Jun	h	48	123
SC1623	b	sxs1	GEN 0	145		07-Jun	25-Jun	25-Jun	02-Jul	36	142
SC1623	c	sxs1	GEN 0	2054		10-Jun	25-Jun	25-Jun	02-Jul	36	148
SC1624	a	sxs1	GEN 0	2042		07-Jun	25-Jun	25-Jun	02-Jul	40	212
SC1624	b	sxs1	GEN 0	1882		07-Jun	25-Jun	25-Jun	02-Jul	21	123
SC1624	c	sxs1	GEN 0	1364		07-Jun	25-Jun	25-Jun	02-Jul	32	142
SC1625	a	sxs1	GEN 0	1442		07-Jun	25-Jun	25-Jun	02-Jul	40	143
SC1625	b	sxs1	GEN 0	826		07-Jun	25-Jun	24-Jun	02-Jul	38	138
SC1625	c	sxs1	GEN 0	1409		07-Jun	25-Jun	26-Jun	dead	0	173
SC1626	a	sxs1	GEN 0	187		07-Jun	25-Jun	25-Jun	02-Jul	34	132
SC1626	b	sxs1	GEN 0	498		07-Jun	25-Jun	25-Jun	03-Jul	38	148
SC1626	c	sxs1	GEN 0	1091		07-Jun	25-Jun	24-Jun	02-Jul	34	145
SC1644	a	sxs2	GEN 0	1032		07-Jun	25-Jun	24-Jun	03-Jul	39	138
SC1644	b	sxs2	GEN 0	178		07-Jun	25-Jun	24-Jun	02-Jul	30	145
SC1644	c	sxs2	GEN 0	1432		07-Jun	25-Jun	26-Jun	03-Jul	35	118
SC1647	a	sxs2	GEN 0	1455		07-Jun	25-Jun	25-Jun	02-Jul	38	117
SC1647	b	sxs2	GEN 0	1257		07-Jun	25-Jun	25-Jun	02-Jul	34	141
SC1647	c	sxs2	GEN 0	825		07-Jun	25-Jun	24-Jun	03-Jul	43.5	104
SC1648	a	sxs2	GEN 0	1116		07-Jun	25-Jun	25-Jun	03-Jul	38	120
SC1648	b	sxs2	GEN 0	204		07-Jun	25-Jun	24-Jun	03-Jul	36	146
SC1648	c	sxs2	GEN 0	1608		07-Jun	25-Jun	26-Jun	03-Jul	37	123
SC1653	a	sxs2	GEN 0	191		07-Jun	25-Jun	24-Jun	02-Jul	27	189
SC1653	b	sxs2	GEN 0	1973		07-Jun	25-Jun	24-Jun	02-Jul	37	132
SC1653	c	sxs2	GEN 0	1126		07-Jun	25-Jun	24-Jun	01-Jul	56	192

SC1655	a	sxs2	GEN 0	2069		07-Jun	25-Jun	24-Jun	02-Jul	36	136
SC1655	b	sxs2	GEN 0	274		07-Jun	25-Jun	24-Jun	02-Jul	34	123
SC1655	c	sxs2	GEN 0	915		07-Jun	25-Jun	24-Jun	02-Jul	32	122
SC1657	a	sxs2	GEN 0	340		07-Jun	25-Jun	24-Jun	02-Jul	38.8	125
SC1657	b	sxs2	GEN 0	118		07-Jun	25-Jun	24-Jun	03-Jul	35	118
SC1657	c	sxs2	GEN 0	750		07-Jun	25-Jun	24-Jun	03-Jul	34	140
SC1658	a	sxs2	GEN 0	1475		07-Jun	25-Jun	24-Jun	03-Jul	34	132
SC1658	b	sxs2	GEN 0	1330		07-Jun	25-Jun	24-Jun	03-Jul	35	114
SC1658	c	sxs2	GEN 0	57		07-Jun	25-Jun	24-Jun	02-Jul	31	147
SC1660	a	sxs2	GEN 0	1022		07-Jun	25-Jun	25-Jun	02-Jul	31	102
SC1660	b	sxs2	GEN 0	1645		07-Jun	25-Jun	24-Jun	02-Jul	32	117
SC1660	c	sxs2	GEN 0	1830		07-Jun	25-Jun	24-Jun	02-Jul	31	125
SC1661	a	sxs2	GEN 0	1509		07-Jun	25-Jun	25-Jun	02-Jul	30	140
SC1661	b	sxs2	GEN 0	1191		07-Jun	25-Jun	25-Jun	02-Jul	29	129
SC1661	c	sxs2	GEN 0	1063		07-Jun	25-Jun	28-Jun	01-Jul	70	110
SC1670	a	sxs2	GEN 0	377		07-Jun	25-Jun	24-Jun	02-Jul	42	98
SC1670	b	sxs2	GEN 0	916		07-Jun	25-Jun	26-Jun	02-Jul	33	123
SC1670	c	sxs2	GEN 0	1217		07-Jun	25-Jun	24-Jun	02-Jul	36	107
SC1672	a	sxs2	GEN 0	1124		07-Jun	25-Jun	25-Jun	02-Jul	32	124
SC1672	b	sxs2	GEN 0	726		07-Jun	25-Jun	26-Jun	02-Jul	32	115
SC1672	c	sxs2	GEN 0	1670		07-Jun	25-Jun	25-Jun	02-Jul	25	104
SC1673	a	sxs2	GEN 0	299		07-Jun	25-Jun	25-Jun	01-Jul	39	116
SC1673	b	sxs2	GEN 0	1598		07-Jun	25-Jun	25-Jun	01-Jul	32	110
SC1673	c	sxs2	GEN 0	316		07-Jun	25-Jun	25-Jun	02-Jul	21	100
SC1675	a	sxs2	GEN 0	1141		07-Jun	25-Jun	22-Jun	02-Jul	33	128
SC1675	b	sxs2	GEN 0	285		07-Jun	25-Jun	25-Jun	02-Jul	32	111
SC1675	c	sxs2	GEN 0	1474		07-Jun	25-Jun	25-Jun	02-Jul	31	105
SC1678	a	sxs2	GEN 0	1445		07-Jun	25-Jun	24-Jun	01-Jul	55	123
SC1678	b	sxs2	GEN 0	1318		07-Jun	25-Jun	24-Jun	02-Jul	36	136
SC1678	c	sxs2	GEN 0	155		07-Jun	25-Jun	24-Jun	02-Jul	35	138
SC1679	a	sxs2	GEN 0	101		07-Jun	25-Jun	25-Jun	02-Jul	31	145

SC1679	b	sxs2	GEN 0	177		07-Jun	25-Jun	25-Jun	02-Jul	32	103
SC1679	c	sxs2	GEN 0	1500		07-Jun	25-Jun	25-Jun	02-Jul	33	109
SC1680	a	sxs2	GEN 0	1452		07-Jun	25-Jun	27-Jun	02-Jul	17	112
SC1680	b	sxs2	GEN 0	353		07-Jun	25-Jun	24-Jun	02-Jul	31	116
SC1680	c	sxs2	GEN 0	391		07-Jun	25-Jun	26-Jun	02-Jul	29	98
SC1682	a	sxs2	GEN 0	32		10-Jun	25-Jun	27-Jun	03-Jul	36.5	119
SC1682	b	sxs2	GEN 0	1428		10-Jun	25-Jun	26-Jun	03-Jul	41	117
SC1682	c	sxs2	GEN 0	269		07-Jun	25-Jun	24-Jun	02-Jul	47	104
SC1683	a	sxs2	GEN 0	1562		10-Jun	25-Jun	24-Jun	02-Jul	31	140
SC1683	b	sxs2	GEN 0	751		07-Jun	25-Jun	24-Jun	02-Jul	31	117
SC1683	c	sxs2	GEN 0	1023		10-Jun	25-Jun	26-Jun	02-Jul	31	135
SC1685	a	sxs2	GEN 0	1884		09-Jun	25-Jun	26-Jun	03-Jul	35	147
SC1685	b	sxs2	GEN 0	45		07-Jun	25-Jun	27-Jun	03-Jul	35	104
SC1685	c	sxs2	GEN 0	595		07-Jun	25-Jun	27-Jun	03-Jul	36	104
SC1686	a	sxs2	GEN 0	1357		07-Jun	25-Jun	26-Jun	03-Jul	41	146
SC1686	b	sxs2	GEN 0	665		07-Jun	25-Jun	30-Jun	h	23	111
SC1686	c	sxs2	GEN 0	1618		07-Jun	25-Jun	27-Jun	02-Jul	24.5	134
SC1687	a	sxs2	GEN 0	1208		07-Jun	25-Jun	25-Jun	03-Jul	40	145
SC1687	b	sxs2	GEN 0	1574		07-Jun	25-Jun	26-Jun	03-Jul	43	117
SC1687	c	sxs2	GEN 0	1482		07-Jun	25-Jun	25-Jun	h	41	106
SC1688	a	sxs2	GEN 0	1839		07-Jun	25-Jun	30-Jun	03-Jul	31	114
SC1688	b	sxs2	GEN 0	383		07-Jun	25-Jun	29-Jun	03-Jul	42	121
SC1688	c	sxs2	GEN 0	195		07-Jun	25-Jun	30-Jun	h	35	106
SC1689	a	sxs2	GEN 0	1345		07-Jun	25-Jun	25-Jun	03-Jul	36	121
SC1689	b	sxs2	GEN 0	54		07-Jun	25-Jun	26-Jun	03-Jul	26.5	99
SC1689	c	sxs2	GEN 0	600		07-Jun	25-Jun	27-Jun	03-Jul	36	134
SC1737	a	sxs2	GEN 0	209		10-Jun	25-Jun	27-Jun	01-Jul	50	110
SC1737	b	sxs2	GEN 0	585		07-Jun	25-Jun	28-Jun	03-Jul	36	125
SC1737	c	sxs2	GEN 0	1625		07-Jun	25-Jun	26-Jun	01-Jul	61	181
SC1738	a	sxs2	GEN 0	557		08-Jun	25-Jun	26-Jun	h	28	164
SC1738	b	sxs2	GEN 0	678		08-Jun	25-Jun	26-Jun	h	33	134

SC1738	c	sxs2	GEN 0	825		08-Jun	25-Jun	26-Jun	02-Jul	20	98
SC1614	a	sxw1	GEN 0	1684		08-Jun	25-Jun	27-Jun	01-Jul	50	122
SC1614	b	sxw1	GEN 0	602		08-Jun	25-Jun	27-Jun	h	42.5	145
SC1614	c	sxw1	GEN 0	1667		08-Jun	25-Jun	27-Jun	02-Jul	30	143
SC1615	a	sxw1	GEN 0	1044		08-Jun	25-Jun	30-Jun	01-Jul	23.5	132
SC1615	b	sxw1	GEN 0	665		08-Jun	25-Jun	27-Jun	h	64	234
SC1615	c	sxw1	GEN 0	381		08-Jun	25-Jun	27-Jun	02-Jul	34	132
SC1637	a	sxw1	GEN 0	563		08-Jun	25-Jun	26-Jun	02-Jul	63	161
SC1637	b	sxw1	GEN 0	1536		08-Jun	25-Jun	27-Jun	02-Jul	26.5	123
SC1637	c	sxw1	GEN 0	2027		08-Jun	25-Jun	26-Jun	02-Jul	62	143
SC1638	a	sxw1	GEN 0	629		08-Jun	25-Jun	27-Jun	h	38	143
SC1638	b	sxw1	GEN 0	698		08-Jun	25-Jun	26-Jun	02-Jul	24.5	129
SC1638	c	sxw1	GEN 0	435		08-Jun	25-Jun	01-Jul	02-Jul	35	143
SC1662	a	sxw1	GEN 0	46		08-Jun	25-Jun	25-Jun	h	42	149
SC1662	b	sxw1	GEN 0	1284		08-Jun	25-Jun	28-Jun	01-Jul	27.5	139
SC1662	c	sxw1	GEN 0	1537		08-Jun	25-Jun	27-Jun	02-Jul	44	151
SC1664	a	sxw1	GEN 0	1381		08-Jun	25-Jun	27-Jun	01-Jul	30	103
SC1664	b	sxw1	GEN 0	198		08-Jun	25-Jun	28-Jun	h	39	137
SC1664	c	sxw1	GEN 0	1511		08-Jun	25-Jun	27-Jun	01-Jul	22	215
SC1665	a	sxw1	GEN 0	32		08-Jun	25-Jun	25-Jun	01-Jul	33	137
SC1665	b	sxw1	GEN 0	1472		08-Jun	25-Jun	25-Jun	01-Jul	62	212
SC1665	c	sxw1	GEN 0	1227		08-Jun	25-Jun	25-Jun	02-Jul	32	134
SC1666	a	sxw1	GEN 0	1100		08-Jun	25-Jun	27-Jun	02-Jul	21	146
SC1666	b	sxw1	GEN 0	950		08-Jun	25-Jun	27-Jun	02-Jul	20	111
SC1666	c	sxw1	GEN 0	261		08-Jun	25-Jun	30-Jun	01-Jul	28	116
SC1668	a	sxw1	GEN 0	940		08-Jun	25-Jun	27-Jun	01-Jul	21.5	134
SC1668	b	sxw1	GEN 0	239		08-Jun	25-Jun	26-Jun	02-Jul	32	148
SC1668	c	sxw1	GEN 0	158		08-Jun	25-Jun	25-Jun	03-Jul	32	117
SC1681	a	sxw1	GEN 0	321		08-Jun	25-Jun	25-Jun	02-Jul	42	139
SC1681	b	sxw1	GEN 0	2041		08-Jun	25-Jun	24-Jun	02-Jul	37	101
SC1681	c	sxw1	GEN 0	511		08-Jun	25-Jun	25-Jun	h	69	143

SC1745	a	sxw1	GEN 0	1389		10-Jun	25-Jun	27-Jun	03-Jul	28	100
SC1745	b	sxw1	GEN 0	181		10-Jun	25-Jun	27-Jun	02-Jul	36	107
SC1745	c	sxw1	GEN 0	42		10-Jun	25-Jun	03-Jul	h	46	118
SC1746	a	sxw1	GEN 0	1253		10-Jun	25-Jun	03-Jul	h	37	99
SC1746	b	sxw1	GEN 0	680		10-Jun	25-Jun	02-Jul	h	32	115
SC1746	c	sxw1	GEN 0	855		10-Jun	25-Jun	01-Jul	02-Jul	31	112
SC1747	a	sxw1	GEN 0	1612		10-Jun	25-Jun	01-Jul	03-Jul	29	120
SC1747	b	sxw1	GEN 0	1220		10-Jun	25-Jun	26-Jun	02-Jul	30	100
SC1747	c	sxw1	GEN 0	999		09-Jun	25-Jun	05-Jul	h	39	138
SC1748	a	sxw1	GEN 0	979		10-Jun	25-Jun	dead	h	46	147
SC1748	b	sxw1	GEN 0	869		10-Jun	25-Jun	27-Jun	02-Jul	34.5	124
SC1748	c	sxw1	GEN 0	2004		10-Jun	25-Jun	27-Jun	h	29	144
SC1749	a	sxw1	GEN 0	1969		10-Jun	25-Jun	30-Jun	h	41	140
SC1749	b	sxw1	GEN 0	1934		10-Jun	25-Jun	27-Jun	02-Jul	61	164
SC1749	c	sxw1	GEN 0	349		10-Jun	25-Jun	27-Jun	02-Jul	36	132
SC1750	a	sxw1	GEN 0	726		10-Jun	25-Jun	27-Jun	02-Jul	38	142
SC1750	b	sxw1	GEN 0	1412		10-Jun	25-Jun	27-Jun	01-Jul	15	120
SC1750	c	sxw1	GEN 0	434		10-Jun	25-Jun	28-Jun	h	60	189
SC1752	a	sxw1	GEN 0	286		08-Jun	25-Jun	27-Jun	01-Jul	50	120
SC1752	b	sxw1	GEN 0	1603		08-Jun	25-Jun	27-Jun	01-Jul	34	136
SC1752	c	sxw1	GEN 0	2033		08-Jun	25-Jun	27-Jun	h	29	110
SC1753	a	sxw1	GEN 0	549		08-Jun	25-Jun	27-Jun	h	24	124
SC1753	b	sxw1	GEN 0	881		08-Jun	25-Jun	27-Jun	h	26	124
SC1753	c	sxw1	GEN 0	602		08-Jun	25-Jun	29-Jun	h	50	231
SC1754	a	sxw1	GEN 0	288		08-Jun	25-Jun	28-Jun	03-Jul	31	131
SC1754	b	sxw1	GEN 0	346		08-Jun	25-Jun	29-Jun	02-Jul	29	142
SC1754	c	sxw1	GEN 0	1557		08-Jun	25-Jun	30-Jun	h	48	140
SC1755	a	sxw1	GEN 0	1793		08-Jun	25-Jun	03-Jul	h	31	145
SC1755	b	sxw1	GEN 0	524		08-Jun	25-Jun	27-Jun	02-Jul	22	134
SC1755	c	sxw1	GEN 0	76		08-Jun	25-Jun	25-Jun	02-Jul	28	127
SC1756	a	sxw1	GEN 0	1517		08-Jun	25-Jun	25-Jun	02-Jul	26.5	116

SC1756	b	sxw1	GEN 0	82		08-Jun	25-Jun	25-Jun	h	40	114
SC1756	c	sxw1	GEN 0	1770		08-Jun	25-Jun	29-Jun	h	37.5	143
SC1757	a	sxw1	GEN 0	746		08-Jun	25-Jun	09-Jul	h	52	125
SC1757	b	sxw1	GEN 0	733		08-Jun	25-Jun	10-Jul	03-Jul	53	145
SC1757	c	sxw1	GEN 0	1246		08-Jun	25-Jun	NO	01-Jul	62	116
Sc1758	a	sxw1	GEN 0	1439		08-Jun	25-Jun	28-Jun	h	41	149
Sc1758	b	sxw1	GEN 0	1870		08-Jun	25-Jun	27-Jun	02-Jul	37	134
Sc1758	c	sxw1	GEN 0	1469		08-Jun	25-Jun	27-Jun	02-Jul	20	109
SC1759	a	sxw1	GEN 0	1899		08-Jun	25-Jun	27-Jun	01-Jul	59	104
SC1759	b	sxw1	GEN 0	941		08-Jun	25-Jun	28-Jun	02-Jul	48	154
SC1759	c	sxw1	GEN 0	906		08-Jun	25-Jun	07-Jul	03-Jul	36	141
SC1760	a	sxw1	GEN 0	319		NG	25-Jun		h		
SC1760	b	sxw1	GEN 0	30		10-Jun	25-Jun	28-Jun	h	40	145
SC1760	c	sxw1	GEN 0	1470		NG	25-Jun		h		
SC1691	a	sxw2	GEN 0	908		08-Jun	25-Jun	27-Jun	02-Jul	36	132
SC1691	b	sxw2	GEN 0	150		NG	25-Jun		h		
SC1691	c	sxw2	GEN 0	1875		10-Jun	25-Jun	27-Jun	h	27.5	126
SC1693	a	sxw2	GEN 0	815		10-Jun	25-Jun	27-Jun	h	38	143
SC1693	b	sxw2	GEN 0	200		10-Jun	25-Jun	27-Jun	h	42	144
SC1693	c	sxw2	GEN 0	313		10-Jun	25-Jun	02-Jul	h	36	149
SC1694	a	sxw2	GEN 0	817		10-Jun	25-Jun	26-Jun	02-Jul	27	138
SC1694	b	sxw2	GEN 0	288		10-Jun	25-Jun	26-Jun	h	32	127
SC1694	c	sxw2	GEN 0	488		10-Jun	25-Jun	26-Jun	h	27	132
SC1695	a	sxw2	GEN 0	1279		10-Jun	25-Jun	26-Jun	h	27	134
SC1695	b	sxw2	GEN 0	730		10-Jun	25-Jun	24-Jun	02-Jul	62	163
SC1695	c	sxw2	GEN 0	68		10-Jun	25-Jun	24-Jun	02-Jul	15	97
SC1696	a	sxw2	GEN 0	1810		07-Jun	25-Jun	25-Jun	h	38	142
SC1696	b	sxw2	GEN 0	616		10-Jun	25-Jun	26-Jun	02-Jul	41	146
SC1696	c	sxw2	GEN 0	1864		10-Jun	25-Jun	27-Jun	h	33	123
SC1699	a	sxw2	GEN 0	31		10-Jun	25-Jun	28-Jun	h	33	118
SC1699	b	sxw2	GEN 0	200		10-Jun	25-Jun	27-Jun	03-Jul	39	129

SC1699	c	sxw2	GEN 0	243		07-Jun	25-Jun	24-Jun	02-Jul	44	106
SC1701	a	sxw2	GEN 0	658		07-Jun	25-Jun	24-Jun	02-Jul	32	139
SC1701	b	sxw2	GEN 0	941		07-Jun	25-Jun	25-Jun	h	29	140
SC1701	c	sxw2	GEN 0	945		07-Jun	25-Jun	25-Jun	01-Jul	17	112
SC1702	a	sxw2	GEN 0	560		08-Jun	25-Jun	26-Jun	01-Jul	42	196
SC1702	b	sxw2	GEN 0	1911		08-Jun	25-Jun	26-Jun	01-Jul	60	181
SC1702	c	sxw2	GEN 0	1634		08-Jun	25-Jun	27-Jun	02-Jul	25	123
SC1703	a	sxw2	GEN 0	1353		08-Jun	25-Jun	01-Jul	02-Jul	37.5	119
SC1703	b	sxw2	GEN 0	363		08-Jun	25-Jun	27-Jun	03-Jul	26	142
SC1703	c	sxw2	GEN 0	1538		08-Jun	25-Jun	27-Jun	02-Jul	22	124
SC1704	a	sxw2	GEN 0	384		08-Jun	25-Jun	27-Jun	03-Jul	33	126
SC1704	b	sxw2	GEN 0	1814		08-Jun	25-Jun	27-Jun	02-Jul	46	129
SC1704	c	sxw2	GEN 0	678		08-Jun	25-Jun	29-Jun	01-Jul	60	163
SC1705	a	sxw2	GEN 0	328		08-Jun	25-Jun	25-Jun	02-Jul	34	129
SC1705	b	sxw2	GEN 0	1026		08-Jun	25-Jun	27-Jun	02-Jul	29	135
SC1705	c	sxw2	GEN 0	38		08-Jun	25-Jun	26-Jun	h	41	118
SC1706	a	sxw2	GEN 0	1256		08-Jun	25-Jun	26-Jun	02-Jul	31	135
SC1706	b	sxw2	GEN 0	1857		08-Jun	25-Jun	26-Jun	02-Jul	43	103
SC1706	c	sxw2	GEN 0	1302		08-Jun	25-Jun	27-Jun	02-Jul	24	107
SC1707	a	sxw2	GEN 0	701		08-Jun	25-Jun	06-Jul	03-Jul	34	134
SC1707	b	sxw2	GEN 0	1819		08-Jun	25-Jun	26-Jun	h	37.5	120
SC1707	c	sxw2	GEN 0	1449		08-Jun	25-Jun	26-Jun	h	32	100
SC1708	a	sxw2	GEN 0	589		08-Jun	25-Jun	26-Jun	02-Jul	70	127
SC1708	b	sxw2	GEN 0	505		08-Jun	25-Jun	26-Jun	01-Jul	68	126
SC1708	c	sxw2	GEN 0	182		08-Jun	25-Jun	24-Jun	02-Jul	31	111
SC1709	a	sxw2	GEN 0	638		10-Jun	25-Jun	28-Jun	h	26	132
SC1709	b	sxw2	GEN 0	1545		10-Jun	25-Jun	01-Jul	h	32	112
SC1709	c	sxw2	GEN 0	920		10-Jun	25-Jun	28-Jun	02-Jul	34	123
SC1710	a	sxw2	GEN 0	15		10-Jun	25-Jun	28-Jun	h	33	122
SC1710	b	sxw2	GEN 0	923		10-Jun	25-Jun	27-Jun	02-Jul	36	138
SC1710	c	sxw2	GEN 0	1964		08-Jun	25-Jun	27-Jun	02-Jul	24	101

SC1711	a	sxw2	GEN 0	345		10-Jun	25-Jun	27-Jun	02-Jul	23	136	
SC1711	b	sxw2	GEN 0	252		10-Jun	25-Jun	28-Jun	03-Jul	37	128	
SC1711	c	sxw2	GEN 0	566		07-Jun	25-Jun	25-Jun	02-Jul	24.5	103	
SC1712	a	sxw2	GEN 0	1477		07-Jun	25-Jun	27-Jun	02-Jul	25.5	126	
SC1712	b	sxw2	GEN 0	1342		07-Jun	25-Jun	27-Jun	02-Jul	33	101	
SC1712	c	sxw2	GEN 0	91		07-Jun	25-Jun	24-Jun	02-Jul	43	101	
SC1713	a	sxw2	GEN 0	1932		08-Jun	25-Jun	26-Jun	02-Jul	69	193	
SC1713	b	sxw2	GEN 0	1880		10-Jun	25-Jun	03-Jul	h	38	148	
SC1713	c	sxw2	GEN 0	665		08-Jun	25-Jun	30-Jun	03-Jul	58	99	
SC1716	a	sxw2	GEN 0	1371		10-Jun	25-Jun	27-Jun	02-Jul	31	111	
SC1716	b	sxw2	GEN 0	954		10-Jun	25-Jun	01-Jul	03-Jul	45	124	
SC1716	c	sxw2	GEN 0	605		08-Jun	25-Jun	09-Jul	02-Jul	39	101	
SC1717	a	sxw2	GEN 0	1057		10-Jun	25-Jun	01-Jul	h	42.5	124	
SC1717	b	sxw2	GEN 0	1996		10-Jun	25-Jun	01-Jul	h	25	138	
SC1717	c	sxw2	GEN 0	1579		10-Jun	25-Jun	27-Jun	02-Jul	30	122	
SC1719	a	sxw2	GEN 0	1137		08-Jun	25-Jun	26-Jun	02-Jul	30.5	136	
SC1719	b	sxw2	GEN 0	1583		07-Jun	25-Jun	26-Jun	02-Jul	21	106	
SC1719	c	sxw2	GEN 0	624		08-Jun	25-Jun	28-Jun	03-Jul	42	110	
SC1721	a	sxw2	GEN 0	1956		10-Jun	25-Jun	01-Jul	h	35	127	
SC1721	b	sxw2	GEN 0	2057		ng	25-Jun		h			
SC1721	c	sxw2	GEN 0	197		07-Jun	25-Jun	02-Jul	h	34	132	
SC1722	a	sxw2	GEN 0	80		10-Jun	25-Jun	03-Jul	02-Jul	32	128	
SC1722	b	sxw2	GEN 0	16		10-Jun	25-Jun	01-Jul	h	49	148	
SC1722	c	sxw2	GEN 0	1687		07-Jun	25-Jun	01-Jul	02-Jul	24	117	
SC1723	a	sxw2	GEN 0	1034		08-Jun	25-Jun	27-Jun	02-Jul	28	138	
SC1723	b	sxw2	GEN 0	704		08-Jun	25-Jun	27-Jun	01-Jul	68	123	
SC1723	c	sxw2	GEN 0	990		10-Jun	25-Jun	28-Jun	03-Jul	39	127	
1444 bW1		a	winter1	GEN 0	150		10-Jun	25-Jun	28-Jun	h	31	142
1444 bW1		b	winter1	GEN 0	1952		10-Jun	25-Jun	28-Jun	03-Jul	40	234
1444 bW1		c	winter1	GEN 0	1020		11-Jun	25-Jun	28-Jun	h	44	159
1444 dW1		a	winter1	GEN 0	446		10-Jun	25-Jun	29-Jun	03-Jul	29	145

1444 dW1	b	winter1	GEN 0	1031	10-Jun	25-Jun	29-Jun	03-Jul	39	146
1444 dW1	c	winter1	GEN 0	1177	10-Jun	25-Jun	30-Jun	h	44.5	152
1446 aW1	a	winter1	GEN 0	432	10-Jun	25-Jun	30-Jun	03-Jul	40	136
1446 aW1	b	winter1	GEN 0	1547	10-Jun	25-Jun	29-Jun	03-Jul	36	138
1446 aW1	c	winter1	GEN 0	276	10-Jun	25-Jun	30-Jun	03-Jul	39	145
1448 aW1	a	winter1	GEN 0	111	10-Jun	25-Jun	04-Jul	h	40	148
1448 aW1	b	winter1	GEN 0	643	10-Jun	25-Jun	03-Jul	03-Jul	35	224
1448 aW1	c	winter1	GEN 0	39	10-Jun	25-Jun	02-Jul	03-Jul	47	171
1448 bW1	a	winter1	GEN 0	1438	10-Jun	25-Jun	02-Jul	h	44	167
1448 bW1	b	winter1	GEN 0	947	10-Jun	25-Jun	27-Jun	03-Jul	32	135
1448 bW1	c	winter1	GEN 0	13	10-Jun	25-Jun	27-Jun	03-Jul	32	149
1451 bW1	a	winter1	GEN 0	1653	10-Jun	25-Jun	27-Jun	h	46.5	172
1451 bW1	b	winter1	GEN 0	969	10-Jun	25-Jun	27-Jun	03-Jul	38	167
1451 bW1	c	winter1	GEN 0	180	10-Jun	25-Jun	27-Jun	03-Jul	32	151
1455 aW1	a	winter1	GEN 0	1534	10-Jun	25-Jun	28-Jun	h	40	173
1455 aW1	b	winter1	GEN 0	664	10-Jun	25-Jun	28-Jun	03-Jul	40	169
1455 aW1	c	winter1	GEN 0	919	10-Jun	25-Jun	28-Jun	03-Jul	39	155
1460 dW1	a	winter1	GEN 0	1504	10-Jun	25-Jun	28-Jun	03-Jul	35	147
1460 dW1	b	winter1	GEN 0	1510	10-Jun	25-Jun	30-Jun	03-Jul	50	150
1460 dW1	c	winter1	GEN 0	1374	10-Jun	25-Jun	04-Jul	h	47.5	161
1462 dW1	a	winter1	GEN 0	450	10-Jun	25-Jun	30-Jun	03-Jul	42.5	163
1462 dW1	b	winter1	GEN 0	1202	10-Jun	25-Jun	27-Jun	03-Jul	35	133
1462 dW1	c	winter1	GEN 0	168	10-Jun	25-Jun	27-Jun	03-Jul	39	123
1463 aW1	a	winter1	GEN 0	929	07-Jun	25-Jun	27-Jun	h	45	175
1463 aW1	b	winter1	GEN 0	1672	10-Jun	25-Jun	01-Jul	h	40	147
1463 aW1	c	winter1	GEN 0	1991	10-Jun	25-Jun	01-Jul	02-Jul	15	94
1463 bW1	a	winter1	GEN 0	805	07-Jun	25-Jun	28-Jun	h	37	158
1463 bW1	b	winter1	GEN 0	1364	07-Jun	25-Jun	28-Jun	h	39	141
1463 bW1	c	winter1	GEN 0	461	07-Jun	25-Jun	28-Jun	h	45	139
1463 cW1	a	winter1	GEN 0	541	10-Jun	25-Jun	03-Jul	h	41	153
1463 cW1	b	winter1	GEN 0	2008	07-Jun	25-Jun	27-Jun	h	36	149

1463 cW1	c	winter1	GEN 0	219		10-Jun	25-Jun	27-Jun	h	35	148
1464 cW1	a	winter1	GEN 0	2091		07-Jun	25-Jun	27-Jun	h	33	134
1464 cW1	b	winter1	GEN 0	1308		13-Jun	25-Jun	30-Jun	h	40.5	166
1464 cW1	c	winter1	GEN 0	1396		07-Jun	25-Jun	27-Jun	h	38	171
1465 bW1	a	winter1	GEN 0	625		10-Jun	25-Jun	27-Jun	h	32	160
1465 bW1	b	winter1	GEN 0	821		07-Jun	25-Jun	27-Jun	h	35.5	126
1465 bW1	c	winter1	GEN 0	1268		07-Jun	25-Jun	30-Jun	h	31	146
1471 aW1	a	winter1	GEN 0	1598		07-Jun	25-Jun	25-Jun	h	50.5	100
1471 aW1	b	winter1	GEN 0	225		07-Jun	25-Jun	26-Jun	h	39	169
1471 aW1	c	winter1	GEN 0	1451		07-Jun	25-Jun	26-Jun	h	50	188
1471 cW1	a	winter1	GEN 0	405		07-Jun	25-Jun	27-Jun	h	39	178
1471 cW1	b	winter1	GEN 0	256		07-Jun	25-Jun	25-Jun	h	40	161
1471 cW1	c	winter1	GEN 0	1663		07-Jun	25-Jun	25-Jun	01-Jul	54	128
1474 bW1	a	winter1	GEN 0	2073		07-Jun	25-Jun	26-Jun	h	44.5	187
1474 bW1	b	winter1	GEN 0	384		07-Jun	25-Jun	26-Jun	h	39.2	213
1474 bW1	c	winter1	GEN 0	1143		07-Jun	25-Jun	26-Jun	h	45	192
1474 cW1	a	winter1	GEN 0	275		07-Jun	25-Jun	26-Jun	h	46.5	197
1474 cW1	b	winter1	GEN 0	266		07-Jun	25-Jun	27-Jun	h	37	196
1474 cW1	c	winter1	GEN 0	6		07-Jun	25-Jun	27-Jun	h	50	212
1474 dW1	a	winter1	GEN 0	1202		07-Jun	25-Jun	27-Jun	h	48	210
1474 dW1	b	winter1	GEN 0	563		07-Jun	25-Jun	27-Jun	h	46	201
1474 dW1	c	winter1	GEN 0	830		07-Jun	25-Jun	27-Jun	h	49	191
1475 cW1	a	winter1	GEN 0	1523		07-Jun	25-Jun	26-Jun	h	55	236
1475 cW1	b	winter1	GEN 0	1804		07-Jun	25-Jun	27-Jun	h	47	250
1475 cW1	c	winter1	GEN 0	1269		07-Jun	25-Jun	26-Jun	h	53	222
1477 aW1	a	winter1	GEN 0	477		07-Jun	25-Jun	26-Jun	h	52	125
1477 aW1	b	winter1	GEN 0	211		07-Jun	25-Jun	26-Jun	h	43	111
1477 aW1	c	winter1	GEN 0	1825		07-Jun	25-Jun	26-Jun	h	52	121
1487 aW1	a	winter1	GEN 0	1641		07-Jun	25-Jun	26-Jun	h	48	202
1487 aW1	b	winter1	GEN 0	1727		07-Jun	25-Jun	26-Jun	h	48	206
1487 aW1	c	winter1	GEN 0	1065		07-Jun	25-Jun	26-Jun	h	45	210

1487 bW1	a	winter1	GEN 0	200	07-Jun	25-Jun	26-Jun	02-Jul	26	137
1487 bW1	b	winter1	GEN 0	1834	07-Jun	25-Jun	27-Jun	03-Jul	34	152
1487 bW1	c	winter1	GEN 0	1303	07-Jun	25-Jun	30-Jun	03-Jul	41.5	148
1487 cW1	a	winter1	GEN 0	1872	07-Jun	25-Jun	30-Jun	03-Jul	35	165
1487 cW1	b	winter1	GEN 0	1841	07-Jun	25-Jun	30-Jun	h	35.5	153
1487 cW1	c	winter1	GEN 0	1921	07-Jun	25-Jun	27-Jun	02-Jul	34	147
1487 dW1	a	winter1	GEN 0	1479	07-Jun	25-Jun	28-Jun	03-Jul	39	167
1487 dW1	b	winter1	GEN 0	866	07-Jun	25-Jun	01-Jul	h	31	156
1487 dW1	c	winter1	GEN 0	295	07-Jun	25-Jun	26-Jun	03-Jul	38.2	161
1456 cW3	a	winter2	GEN 0	1877	07-Jun	25-Jun	01-Jul	03-Jul	37	160
1456 cW3	b	winter2	GEN 0	574	07-Jun	25-Jun	27-Jun	03-Jul	43	181
1456 cW3	c	winter2	GEN 0	1246	07-Jun	25-Jun	27-Jun	03-Jul	33.5	172
1456 dW3	a	winter2	GEN 0	781	07-Jun	25-Jun	28-Jun	03-Jul	34	120
1456 dW3	b	winter2	GEN 0	1243	07-Jun	25-Jun	28-Jun	03-Jul	38	146
1456 dW3	c	winter2	GEN 0	804	07-Jun	25-Jun	26-Jun	03-Jul	34	137
1457 bW3	a	winter2	GEN 0	221	07-Jun	25-Jun	26-Jun	03-Jul	39.5	117
1457 bW3	b	winter2	GEN 0	1887	07-Jun	25-Jun	26-Jun	03-Jul	36	102
1457 bW3	c	winter2	GEN 0	1790	07-Jun	25-Jun	26-Jun	03-Jul	39	129
1467 cW3	a	winter2	GEN 0	247	07-Jun	25-Jun	27-Jun	03-Jul	34	59
1467 cW3	b	winter2	GEN 0	968	07-Jun	25-Jun	01-Jul	03-Jul	25	42
1467 cW3	c	winter2	GEN 0	1526	07-Jun	25-Jun	26-Jun	03-Jul	34	56
1479 bW3	a	winter2	GEN 0	1423	07-Jun	25-Jun	27-Jun	03-Jul	36.5	97
1479 bW3	b	winter2	GEN 0	202	07-Jun	25-Jun	26-Jun	03-Jul	33	101
1479 bW3	c	winter2	GEN 0	539	07-Jun	25-Jun	27-Jun	h	39	92
1481 aW3	a	winter2	GEN 0	2049	07-Jun	25-Jun	01-Jul	h	47	101
1481 aW3	b	winter2	GEN 0	1283	07-Jun	25-Jun	27-Jun	h	34	62
1481 aW3	c	winter2	GEN 0	454	07-Jun	25-Jun	27-Jun	h	42	105
1482 dW3	a	winter2	GEN 0	39	07-Jun	25-Jun	29-Jun	h	44	101
1482 dW3	b	winter2	GEN 0	850	07-Jun	25-Jun	30-Jun	h	33	96
1482 dW3	c	winter2	GEN 0	1261	07-Jun	25-Jun	25-Jun	02-Jul	31	72
1483 aW3	a	winter2	GEN 0	999	07-Jun	25-Jun	25-Jun	h	40	85

1483 aW3	b	winter2	GEN 0	1935	07-Jun	25-Jun	25-Jun	h	30	218
1483 aW3	c	winter2	GEN 0	280	07-Jun	25-Jun	25-Jun	h	43	120
1486 bW3	a	winter2	GEN 0	1886	07-Jun	25-Jun	26-Jun	h	37	90
1486 bW3	b	winter2	GEN 0	1331	07-Jun	25-Jun	27-Jun	h	45	122
1486 bW3	c	winter2	GEN 0	1545	07-Jun	25-Jun	27-Jun	h	41.5	116
1504 bW3	a	winter2	GEN 0	2018	07-Jun	25-Jun	27-Jun	h	35	114
1504 bW3	b	winter2	GEN 0	1397	07-Jun	25-Jun	27-Jun	h	41	126
1504 bW3	c	winter2	GEN 0	1448	07-Jun	25-Jun	27-Jun	h	40	131
1507 aW3	a	winter2	GEN 0	897	07-Jun	25-Jun	27-Jun	02-Jul	32	35
1507 aW3	b	winter2	GEN 0	219	07-Jun	25-Jun	27-Jun	h	41	42
1507 aW3	c	winter2	GEN 0	355	07-Jun	25-Jun	27-Jun	01-Jul	19	26
1508 dW3	a	winter2	GEN 0	1225	07-Jun	25-Jun	27-Jun	h	40	98
1508 dW3	b	winter2	GEN 0	649	07-Jun	25-Jun	27-Jun	h	41	107
1508 dW3	c	winter2	GEN 0	228	07-Jun	25-Jun	26-Jun	h	38	92
1509 cW3	a	winter2	GEN 0	689	07-Jun	25-Jun	27-Jun	h	37	56
1509 cW3	b	winter2	GEN 0	2065	07-Jun	25-Jun	26-Jun	h	36	63
1509 cW3	c	winter2	GEN 0	1047	08-Jun	25-Jun	27-Jun	h	35	71
1511 cW3	a	winter2	GEN 0	1485	07-Jun	25-Jun	29-Jun	02-Jul	30	147
1511 cW3	b	winter2	GEN 0	943	07-Jun	25-Jun	28-Jun	02-Jul	48	156
1511 cW3	c	winter2	GEN 0	738	07-Jun	25-Jun	03-Jul	h	32	168
1512 aW3	a	winter2	GEN 0	754	07-Jun	25-Jun	28-Jun	h	31	124
1512 aW3	b	winter2	GEN 0	521	07-Jun	25-Jun	30-Jun	02-Jul	63	123
1512 aW3	c	winter2	GEN 0	275	07-Jun	25-Jun	28-Jun	h	36.4	128
1512 cW3	a	winter2	GEN 0	944	07-Jun	25-Jun	29-Jun	02-Jul	60	41
1512 cW3	b	winter2	GEN 0	1853	07-Jun	25-Jun	29-Jun	h	33	35
1512 cW3	c	winter2	GEN 0	1751	07-Jun	25-Jun	25-Jun	02-Jul	36	41
1512 dW3	a	winter2	GEN 0	1815	07-Jun	25-Jun	30-Jun	02-Jul	57	34
1512 dW3	b	winter2	GEN 0	855	07-Jun	25-Jun	30-Jun	02-Jul	44	78
1512 dW3	c	winter2	GEN 0	219	07-Jun	25-Jun	29-Jun	03-Jul	27	84
1513 aW3	a	winter2	GEN 0	1615	07-Jun	25-Jun	29-Jun	02-Jul	40	47
1513 aW3	b	winter2	GEN 0	1225	07-Jun	25-Jun	30-Jun	h	38	109

1513 aW3		c	winter2	GEN 0	1869		07-Jun	25-Jun	30-Jun	h	28	113
1513 cW3		a	winter2	GEN 0	1133		07-Jun	25-Jun	30-Jun	01-Jul	19	105
1513 cW3		b	winter2	GEN 0	826		07-Jun	25-Jun	30-Jun	01-Jul	15	41
1513 cW3		c	winter2	GEN 0	236		07-Jun	25-Jun	01-Jul	h	30	31
1513 dW3		a	winter2	GEN 0	1083		07-Jun	25-Jun	27-Jun	02-Jul	62	52
1513 dW3		b	winter2	GEN 0	1485		07-Jun	25-Jun	28-Jun	02-Jul	55	62
1513 dW3		c	winter2	GEN 0	1611		07-Jun	25-Jun	27-Jun	02-Jul	66	95
1514 aW3		a	winter2	GEN 0	1601		07-Jun	25-Jun	27-Jun	02-Jul	20	37
1514 aW3		b	winter2	GEN 0	1210		07-Jun	25-Jun	27-Jun	h	29	117
1514 aW3		c	winter2	GEN 0	224		07-Jun	25-Jun	27-Jun	01-Jul	12	36
1514 cW3		a	winter2	GEN 0	721		08-Jun	25-Jun	27-Jun	03-Jul	65	170
1514 cW3		b	winter2	GEN 0	337		08-Jun	25-Jun	27-Jun	03-Jul	38.1	147
1514 cW3		c	winter2	GEN 0	1074		08-Jun	25-Jun	27-Jun	03-Jul	37	99
1514 dW3		a	winter2	GEN 0	509		07-Jun	25-Jun	02-Jul	h	35	106
1514 dW3		b	winter2	GEN 0	1288		08-Jun	25-Jun	02-Jul	03-Jul	28	154
1514 dW3		c	winter2	GEN 0	305		10-Jun	25-Jun	04-Jul	h	32	148
1515 aW3		a	winter2	GEN 0	1232		10-Jun	25-Jun	02-Jul	03-Jul	36	205
1515 aW3		b	winter2	GEN 0	451		10-Jun	25-Jun	02-Jul	h	39.5	174
1515 aW3		c	winter2	GEN 0	1958		10-Jun	25-Jun	03-Jul	03-Jul	38	181
1515 cW3		a	winter2	GEN 0	1552		07-Jun	25-Jun	03-Jul	03-Jul	23	158
1515 cW3		b	winter2	GEN 0	2085		08-Jun	25-Jun	03-Jul	h	38	197
1515 cW3		c	winter2	GEN 0	1380		10-Jun	25-Jun	27-Jul	02-Jul	25	82
SC1632	a	wxw1	GEN 0	1645		07-Jun	25-Jun	25-Jun	03-Jul	33	101	
SC1632	b	wxw1	GEN 0	1023		07-Jun	25-Jun	25-Jun	02-Jul	27	116	
SC1632	c	wxw1	GEN 0	99		07-Jun	25-Jun	25-Jun	03-Jul	40	120	
SC1633	a	wxw1	GEN 0	1588		07-Jun	25-Jun	25-Jun	03-Jul	32	184	
SC1633	b	wxw1	GEN 0	1759		07-Jun	25-Jun	25-Jun	03-Jul	32	133	
SC1633	c	wxw1	GEN 0	1423		07-Jun	25-Jun	24-Jun	03-Jul	34.2	159	
SC1634	a	wxw1	GEN 0	1059		07-Jun	25-Jun	24-Jun	03-Jul	33	214	
SC1634	b	wxw1	GEN 0	1908		07-Jun	25-Jun	27-Jun	02-Jul	28	175	
SC1634	c	wxw1	GEN 0	49		07-Jun	25-Jun	27-Jun	03-Jul	33	172	

SC1635	a	wxw1	GEN 0	74		07-Jun	25-Jun	25-Jun	03-Jul	32.4	159
SC1635	b	wxw1	GEN 0	936		07-Jun	25-Jun	26-Jun	03-Jul	47.5	219
SC1635	c	wxw1	GEN 0	67		07-Jun	25-Jun	28-Jun	h	41	191
SC1636	a	wxw1	GEN 0	339		07-Jun	25-Jun	26-Jun	02-Jul	29	152
SC1636	b	wxw1	GEN 0	492		07-Jun	25-Jun	26-Jun	03-Jul	33	167
SC1636	c	wxw1	GEN 0	623		07-Jun	25-Jun	26-Jun	03-Jul	37.5	171
SC1642	a	wxw1	GEN 0	1209		07-Jun	25-Jun	24-Jun	03-Jul	40.1	186
SC1642	b	wxw1	GEN 0	662		07-Jun	25-Jun	24-Jun	03-Jul	30	72
SC1642	c	wxw1	GEN 0	1636		07-Jun	25-Jun	24-Jun	03-Jul	30	161
SC1643	a	wxw1	GEN 0	1056		07-Jun	25-Jun	24-Jun	01-Jul	35	139
SC1643	b	wxw1	GEN 0	79		07-Jun	25-Jun	26-Jun	02-Jul	64	129
SC1643	c	wxw1	GEN 0	1438		07-Jun	25-Jun	28-Jun	02-Jul	30	131
SC1769	a	wxw1	GEN 0	46		07-Jun	25-Jun	26-Jun	03-Jul	35	127
SC1769	b	wxw1	GEN 0	678		07-Jun	25-Jun	25-Jun	03-Jul	35	113
SC1769	c	wxw1	GEN 0	1640		07-Jun	25-Jun	24-Jun	03-Jul	33	123
SC1771	a	wxw1	GEN 0	1262		10-Jun	25-Jun	25-Jun	01-Jul	24	193
SC1771	b	wxw1	GEN 0	1734		10-Jun	25-Jun	25-Jun	02-Jul	25.5	62
SC1771	c	wxw1	GEN 0	339		07-Jun	25-Jun	27-Jun	03-Jul	24	76
SC1773	a	wxw1	GEN 0	738		10-Jun	25-Jun	27-Jun	02-Jul	24	16
SC1773	b	wxw1	GEN 0	297		10-Jun	25-Jun	27-Jun	02-Jul	27	45
SC1773	c	wxw1	GEN 0	2029		10-Jun	25-Jun	27-Jun	03-Jul	28	52
SC1774	a	wxw1	GEN 0	840		07-Jun	25-Jun	28-Jun	02-Jul	32	150
SC1774	b	wxw1	GEN 0	329		07-Jun	25-Jun	29-Jun	02-Jul	41	172
SC1774	c	wxw1	GEN 0	591		10-Jun	25-Jun	30-Jun	02-Jul	40.5	119
SC1776	a	wxw1	GEN 0	881		07-Jun	25-Jun	27-Jun	02-Jul	28.5	137
SC1776	b	wxw1	GEN 0	891		19-Jun	25-Jun	27-Jun	02-Jul	32	132
SC1776	c	wxw1	GEN 0	1804		07-Jun	25-Jun	25-Jun	03-Jul	27	129
SC1777	a	wxw1	GEN 0	240		10-Jun	25-Jun	26-Jun	03-Jul	36	198
SC1777	b	wxw1	GEN 0	733		08-Jun	25-Jun	26-Jun	02-Jul	32	190
SC1777	c	wxw1	GEN 0	935		10-Jun	25-Jun	27-Jun	02-Jul	39	210
SC1779	a	wxw1	GEN 0	744		10-Jun	25-Jun	28-Jun	02-Jul	25	142

SC1779	b	wxw1	GEN 0	67	07-Jun	25-Jun	25-Jun	02-Jul	29	131
SC1779	c	wxw1	GEN 0	1667	07-Jun	25-Jun	25-Jun	03-Jul	27	123
SC1780	a	wxw1	GEN 0	1316	10-Jun	25-Jun	27-Jun	02-Jul	51	135
SC1780	b	wxw1	GEN 0	599	10-Jun	25-Jun	29-Jun	h	41.5	287
SC1780	c	wxw1	GEN 0	133	08-Jun	25-Jun	27-Jun	02-Jul	30	263
SC1781	a	wxw1	GEN 0	1874	07-Jun	25-Jun	29-Jun	02-Jul	47	125
SC1781	b	wxw1	GEN 0	2042	07-Jun	25-Jun	24-Jun	02-Jul	29	129
SC1781	c	wxw1	GEN 0	2080	07-Jun	25-Jun	29-Jun	02-Jul	33	119
SC1782	a	wxw1	GEN 0	1071	07-Jun	25-Jun	27-Jun	h	33	150
SC1782	b	wxw1	GEN 0	1551	07-Jun	25-Jun	29-Jun	h	34	155
SC1782	c	wxw1	GEN 0	918	10-Jun	25-Jun	28-Jun	h	35	162
SC1784	a	wxw1	GEN 0	1082	10-Jun	25-Jun	28-Jun	h	45	89
SC1784	b	wxw1	GEN 0	1571	10-Jun	25-Jun	28-Jun	h	42	76
SC1784	c	wxw1	GEN 0	2048	10-Jun	25-Jun	28-Jun	h	58	97
SC1785	a	wxw1	GEN 0	177	10-Jun	25-Jun	28-Jun	h	32	149
SC1785	b	wxw1	GEN 0	273	07-Jun	25-Jun	25-Jun	01-Jul	37	215
SC1785	c	wxw1	GEN 0	387	07-Jun	25-Jun	28-Jun	h	41	162
SC1787	a	wxw1	GEN 0	1498	07-Jun	25-Jun	28-Jun	h	24	193
SC1787	b	wxw1	GEN 0	977	07-Jun	25-Jun	28-Jun	h	47	79
SC1787	c	wxw1	GEN 0	1211	07-Jun	25-Jun	02-Jul	03-Jul	43	216
SC1788	a	wxw1	GEN 0	952	07-Jun	25-Jun	02-Jul	h	27	184
SC1788	b	wxw1	GEN 0	1103	07-Jun	25-Jun	02-Jul	h	47	135
SC1788	c	wxw1	GEN 0	409	07-Jun	25-Jun	02-Jul	h	39	147
SC1790	a	wxw1	GEN 0	529	07-Jun	25-Jun	02-Jul	h	64	210
SC1790	b	wxw1	GEN 0	161	07-Jun	25-Jun	02-Jul	03-Jul	49	233
SC1790	c	wxw1	GEN 0	1312	07-Jun	25-Jun	02-Jul	h	36	204
SC1791	a	wxw1	GEN 0	277	08-Jun	25-Jun	02-Jul	02-Jul	42	173
SC1791	b	wxw1	GEN 0	157	08-Jun	25-Jun	02-Jul	02-Jul	36	141
SC1791	c	wxw1	GEN 0	1402	08-Jun	25-Jun	27-Jun	02-Jul	42	135
SC1792	a	wxw1	GEN 0	1550	08-Jun	25-Jun	27-Jun	03-Jul	39	117
SC1792	b	wxw1	GEN 0	22	08-Jun	25-Jun	27-Jun	h	61	171

SC1792	c	wxw1	GEN 0	2038		08-Jun	25-Jun	04-Jul	h	35	154	
SC1793	a	wxw1	GEN 0	756		10-Jun	25-Jun	26-Jun	02-Jul	44	102	
SC1793	b	wxw1	GEN 0	1143		07-Jun	25-Jun	24-Jun	01-Jul	63	120	
SC1793	c	wxw1	GEN 0	672		07-Jun	25-Jun	25-Jun	02-Jul	66	148	
SC1803	a	wxw2	GEN 0	997		10-Jun	25-Jun	no	02-Jul	28		
SC1803	b	wxw2	GEN 0	775		10-Jun	25-Jun	08-Jul	02-Jul	52	216	
SC1803	c	wxw2	GEN 0	1362		10-Jun	25-Jun	05-Jul	h	65	146	
SC1804	a	wxw2	GEN 0	1361		10-Jun	25-Jun	30-Jun	03-Jul	36	172	
SC1804	b	wxw2	GEN 0	469		10-Jun	25-Jun	26-Jun	03-Jul	36	176	
SC1804	c	wxw2	GEN 0	864		10-Jun	25-Jun	26-Jun	03-Jul	35	168	
SC1805	a	wxw2	GEN 0	1591		10-Jun	25-Jun	27-Jun	03-Jul	30	249	
SC1805	b	wxw2	GEN 0	667		10-Jun	25-Jun	01-Jul	03-Jul	43	207	
SC1805	c	wxw2	GEN 0	110		10-Jun	25-Jun	27-Jun	h	18	231	
SC1806	a	wxw2	GEN 0	1985		10-Jun	25-Jun	27-Jul	h	42	212	
SC1806	b	wxw2	GEN 0	1246		10-Jun	25-Jun	24-Jun	03-Jul	31	219	
SC1806	c	wxw2	GEN 0	1490		10-Jun	25-Jun	30-Jun	03-Jul	42	231	
SC1807	a	wxw2	GEN 0	1041		10-Jun	25-Jun	25-Jun	03-Jul	28	129	
SC1807	b	wxw2	GEN 0	1380		10-Jun	25-Jun	27-Jun	h	31	130	
SC1807	c	wxw2	GEN 0	494		10-Jun	25-Jun	27-Jun	h	31	127	
SC1808	a	wxw2	GEN 0	1199		10-Jun	25-Jun	27-Jun	03-Jul	40	215	
SC1808	b	wxw2	GEN 0	578		10-Jun	25-Jun	26-Jun	01-Jul	45	216	
SC1808	c	wxw2	GEN 0	1416		10-Jun	25-Jun	25-Jun	02-Jul	30	227	
SC1809	a	wxw2	GEN 0	1338		10-Jun	25-Jun	26-Jun	03-Jul	24	82	
SC1809	b	wxw2	GEN 0	1981		10-Jun	25-Jun	26-Jun	03-Jul	25	103	
SC1809	c	wxw2	GEN 0	1047		10-Jun	25-Jun	28-Jun	03-Jul	16	87	
SC1810	a	wxw2	GEN 0	319		10-Jun	25-Jun	28-Jun	03-Jul	30	96	
SC1810	b	wxw2	GEN 0	183		10-Jun	25-Jun	28-Jun	03-Jul	41	109	
SC1810	c	wxw2	GEN 0	665		10-Jun	25-Jun	28-Jun	02-Jul	35	88	
SC1811	a	wxw2	GEN 0	311		10-Jun	25-Jun	28-Jun	h	59	143	
SC1811	b	wxw2	GEN 0	19		10-Jun	25-Jun	29-Jun	h	28	59	
SC1811	c	wxw2	GEN 0	1084		10-Jun	25-Jun	29-Jun	03-Jul	28	61	

SC1812	a	wxw2	GEN 0	1825		10-Jun	25-Jun	28-Jun	h	30	62
SC1812	b	wxw2	GEN 0	1910		10-Jun	25-Jun	28-Jun	03-Jul	35	70
SC1812	c	wxw2	GEN 0	725		10-Jun	25-Jun	27-Jun	03-Jul	51	81
SC1818	a	wxw2	GEN 0	675		10-Jun	25-Jun	27-Jun	03-Jul	40	91
SC1818	b	wxw2	GEN 0	410		10-Jun	25-Jun	28-Jun	h	42	87
SC1818	c	wxw2	GEN 0	2006		10-Jun	25-Jun	28-Jun	h	36	93
SC1820	a	wxw2	GEN 0	1884		07-Jun	25-Jun	28-Jun	02-Jul	38	217
SC1820	b	wxw2	GEN 0	1283		07-Jun	25-Jun	26-Jun	02-Jul	25	200
SC1820	c	wxw2	GEN 0	181		07-Jun	25-Jun	26-Jun	h	32	179
SC1821	a	wxw2	GEN 0	78		07-Jun	25-Jun	28-Jun	h	42	196
SC1821	b	wxw2	GEN 0	1798		07-Jun	25-Jun	29-Jun	03-Jul	36	269
SC1821	c	wxw2	GEN 0	1308		07-Jun	25-Jun	28-Jun	02-Jul	30	167
SC1822	a	wxw2	GEN 0	562		07-Jun	25-Jun	27-Jun	02-Jul	28	181
SC1822	b	wxw2	GEN 0	536		07-Jun	25-Jun	28-Jun	02-Jul	30	197
SC1822	c	wxw2	GEN 0	948		07-Jun	25-Jun	27-Jun	02-Jul	25	172
SC1823	a	wxw2	GEN 0	912		07-Jun	25-Jun	28-Jun	02-Jul	35	274
SC1823	b	wxw2	GEN 0	972		07-Jun	25-Jun	27-Jun	02-Jul	29	191
SC1823	c	wxw2	GEN 0	174		07-Jun	25-Jun	28-Jun	02-Jul	21	98
SC1824	a	wxw2	GEN 0	352		07-Jun	25-Jun	26-Jun	01-Jul	35	106
SC1824	b	wxw2	GEN 0	47		07-Jun	25-Jun	25-Jun	02-Jul	29	130
SC1824	c	wxw2	GEN 0	1978		07-Jun	25-Jun	28-Jun	02-Jul	40	165
SC1825	a	wxw2	GEN 0	218		07-Jun	25-Jun	26-Jun	03-Jul	31	237
SC1825	b	wxw2	GEN 0	1349		07-Jun	25-Jun	28-Jun	02-Jul	39.5	241
SC1825	c	wxw2	GEN 0	220		07-Jun	25-Jun	28-Jun	01-Jul	39	193
SC1826	a	wxw2	GEN 0	1703		07-Jun	25-Jun	26-Jun	02-Jul	13	12
SC1826	b	wxw2	GEN 0	711		07-Jun	25-Jun	26-Jun	02-Jul	25	46
SC1826	c	wxw2	GEN 0	1439		07-Jun	25-Jun	26-Jun	02-Jul	27	52
SC1827	a	wxw2	GEN 0	1315		07-Jun	25-Jun	27-Jun	02-Jul	31	155
SC1827	b	wxw2	GEN 0	1258		07-Jun	25-Jun	27-Jun	02-Jul	32	207
SC1827	c	wxw2	GEN 0	599		07-Jun	25-Jun	27-Jun	02-Jul	25.5	159
SC1828	a	wxw2	GEN 0	494		10-Jun	25-Jun	24-Jun	h	42	141

SC1828	b	wxw2	GEN 0	447		10-Jun	25-Jun	26-Jun	02-Jul	32	121
SC1828	c	wxw2	GEN 0	436		10-Jun	25-Jun	26-Jun	02-Jul	28	127
SC1829	a	wxw2	GEN 0	1854		10-Jun	25-Jun	27-Jun	02-Jul	61	138
SC1829	b	wxw2	GEN 0	436		10-Jun	25-Jun	26-Jun	02-Jul	67	124
SC1829	c	wxw2	GEN 0	248		10-Jun	25-Jun	09-Jul	h	59	128
SC1830	a	wxw2	GEN 0	1399		10-Jun	25-Jun	25-Jun	02-Jul	57	208
SC1830	b	wxw2	GEN 0	269		10-Jun	25-Jun	27-Jun	02-Jul	48	155
SC1830	c	wxw2	GEN 0	611		10-Jun	25-Jun	27-Jun	02-Jul	60	193
SC1831	a	wxw2	GEN 0	1025		ng	25-Jun		h		
SC1831	b	wxw2	GEN 0	1176		10-Jun	25-Jun	27-Jun	02-Jul	37	151
SC1831	c	wxw2	GEN 0	403		10-Jun	25-Jun	27-Jun	02-Jul	34	236
SC1832	a	wxw2	GEN 0	1707		10-Jun	25-Jun	27-Jun	02-Jul	44	165
SC1832	b	wxw2	GEN 0	1704		ng	25-Jun		h		
SC1832	c	wxw2	GEN 0	231		26-Jun	25-Jun	02-Jul	h	57	179
SC1833	a	wxw2	GEN 0	1843		10-Jun	25-Jun	03-Jul	h	65	201
SC1833	b	wxw2	GEN 0	1743		10-Jun	25-Jun	04-Jul	02-Jul	47	197
SC1833	c	wxw2	GEN 0	922		05-Jun	25-Jun	04-Jul	h	69	227
3122	a	control 1	GEN 3	2017		10-Jun	25-Jun	04-Jul	h	63	42
3122	b	control 1	GEN 3	154		06-Jun	25-Jun	04-Jul	h	52	229
3122	c	control 1	GEN 3	1440		10-Jun	25-Jun	03-Jul	h	36	164
3123	a	control 1	GEN 3	1865		11-Jun	25-Jun	05-Jul	h	41.5	136
3123	b	control 1	GEN 3	462		10-Jun	25-Jun	04-Jul	02-Jul	40	142
3123	c	control 1	GEN 3	2047		10-Jun	25-Jun	03-Jul	02-Jul	56	165
3124	a	control 1	GEN 3	786		10-Jun	25-Jun	04-Jul	h	37	188
3124	b	control 1	GEN 3	1869		10-Jun	25-Jun	03-Jul	h	41	213
3124	c	control 1	GEN 3	1262		10-Jun	25-Jun	02-Jul	h	48	175
3125	a	control 1	GEN 3	1119		10-Jun	25-Jun	27-Jun	h	33	171
3125	b	control 1	GEN 3	1261		11-Jun	25-Jun	28-Jun	h	44	167
3125	c	control 1	GEN 3	767		10-Jun	25-Jun	28-Jun	03-Jul	36	149
3126	a	control 1	GEN 3	878		13-Jun	25-Jun	04-Jul	h	49	219
3126	b	control 1	GEN 3	1138		13-Jun	25-Jun	04-Jul	h	36	123

3126	c	control 1	GEN 3	2060	13-Jun	25-Jun	04-Jul	h	43	183
3127	a	control 1	GEN 3	1810	13-Jun	25-Jun	04-Jul	h	36	226
3127	b	control 1	GEN 3	1041	13-Jun	25-Jun	04-Jul	h	35	102
3127	c	control 1	GEN 3	1554	13-Jun	25-Jun	04-Jul	h	63	134
3169	a	control 1	GEN 3	134	13-Jun	25-Jun	05-Jul	h	39	160
3169	b	control 1	GEN 3	588	13-Jun	25-Jun	05-Jul	h	25	172
3169	c	control 1	GEN 3	591	13-Jun	25-Jun	05-Jul	h	20	169
3170	a	control 1	GEN 3	1620	13-Jun	25-Jun	05-Jul	h	59	136
3170	b	control 1	GEN 3	861	13-Jun	25-Jun	05-Jul	h	27	221
3170	c	control 1	GEN 3	1300	13-Jun	25-Jun	05-Jul	h	31	137
3171	a	control 1	GEN 3	1540	13-Jun	25-Jun	05-Jul	03-Jul	65	61
3171	b	control 1	GEN 3	892	13-Jun	25-Jun	05-Jul	h	56	211
3171	c	control 1	GEN 3	112	13-Jun	25-Jun	05-Jul	h	49	158
3172	a	control 1	GEN 3	2019	13-Jun	25-Jun	05-Jul	h	56	140
3172	b	control 1	GEN 3	731	13-Jun	25-Jun	05-Jul	h	57	152
3172	c	control 1	GEN 3	470	13-Jun	25-Jun	05-Jul	h	56	139
3173	a	control 1	GEN 3	209	13-Jun	25-Jun	05-Jul	03-Jul	44	116
3173	b	control 1	GEN 3	1584	13-Jun	25-Jun	11-Jul	h	20	101
3173	c	control 1	GEN 3	1766	13-Jun	25-Jun	06-Jul	h	20	85
3174	a	control 1	GEN 3	606	13-Jun	25-Jun	06-Jul	h	20	177
3174	b	control 1	GEN 3	1538	13-Jun	25-Jun	06-Jul	h	21	78
3174	c	control 1	GEN 3	1776	13-Jun	25-Jun	06-Jul	h	21	76
3175	a	control 1	GEN 3	1675	13-Jun	25-Jun	no	01-Jul	28	
3175	b	control 1	GEN 3	13	13-Jun	25-Jun	06-Jul	h	60	124
3175	c	control 1	GEN 3	1140	12-Jun	25-Jun	07-Jul	h	27	72
3189	a	control 1	GEN 3	1201	12-Jun	25-Jun	06-Jul	02-Jul	59	118
3189	b	control 1	GEN 3	1356	12-Jun	25-Jun	no	02-Jul	27	
3189	c	control 1	GEN 3	454	12-Jun	25-Jun	28-Jun	h	58	47
3190	a	control 1	GEN 3	806	12-Jun	25-Jun	28-Jun	h	26	135
3190	b	control 1	GEN 3	1735	12-Jun	25-Jun	28-Jun	h	41	142
3190	c	control 1	GEN 3	1610	12-Jun	25-Jun	28-Jun	h	24	99

3191	a	control 1	GEN 3	1944	12-Jun	25-Jun	28-Jun	h	21	115
3191	b	control 1	GEN 3	1701	12-Jun	25-Jun	28-Jun	h	51	167
3191	c	control 1	GEN 3	103	12-Jun	25-Jun	28-Jun	h	21	178
3192	a	control 1	GEN 3	773	12-Jun	25-Jun	30-Jun	h	37	116
3192	b	control 1	GEN 3	1993	12-Jun	25-Jun	08-Jul	h	36	105
3192	c	control 1	GEN 3	494	12-Jun	25-Jun	08-Jul	h	22	122
3193	a	control 1	GEN 3	11	12-Jun	25-Jun	08-Jul	h	19	135
3193	b	control 1	GEN 3	1342	12-Jun	25-Jun	09-Jul	h	18	124
3193	c	control 1	GEN 3	743	12-Jun	25-Jun	09-Jul	h	19	129
3194	a	control 1	GEN 3	1475	12-Jun	25-Jun	07-Jul	h	15.5	119
3194	b	control 1	GEN 3	1391	12-Jun	25-Jun	06-Jul	h	38.5	136
3194	c	control 1	GEN 3	775	12-Jun	25-Jun	09-Jul	h	22	127
3195	a	control 1	GEN 3	1945	12-Jun	25-Jun	08-Jul	h	27	143
3195	b	control 1	GEN 3	2081	12-Jun	25-Jun	08-Jul	h	21.5	138
3195	c	control 1	GEN 3	22	12-Jun	25-Jun	08-Jul	h	16	128
3220	a	control 1	GEN 3	1324	12-Jun	25-Jun	08-Jul	h	31	115
3220	b	control 1	GEN 3	53	12-Jun	25-Jun	08-Jul	h	22	116
3220	c	control 1	GEN 3	1485	12-Jun	25-Jun	08-Jul	h	32	113
3224	a	control 1	GEN 3	1797	12-Jun	25-Jun	08-Jul	h	17	38
3224	b	control 1	GEN 3	288	12-Jun	25-Jun	08-Jul	h	16	109
3224	c	control 1	GEN 3	1168	12-Jun	25-Jun	08-Jul	h	15	62
3097	a	control 2	GEN 3	1	12-Jun	25-Jun	08-Jul	02-Jul	41.5	177
3097	b	control 2	GEN 3	1062	12-Jun	25-Jun	08-Jul	02-Jul	32	154
3097	c	control 2	GEN 3	570	12-Jun	25-Jun	27-Jun	h	60	179
3098	a	control 2	GEN 3	1613	12-Jun	25-Jun	27-Jun	h	40	152
3098	b	control 2	GEN 3	1084	12-Jun	25-Jun	27-Jun	h	44	159
3098	c	control 2	GEN 3	1002	12-Jun	25-Jun	27-Jun	h	36	142
3099	a	control 2	GEN 3	1101	12-Jun	25-Jun	27-Jun	h	46	103
3099	b	control 2	GEN 3	179	12-Jun	25-Jun	29-Jun	03-Jul	32	31
3099	c	control 2	GEN 3	876	12-Jun	25-Jun	29-Jun	02-Jul	31	89
3100	a	control 2	GEN 3	908	12-Jun	25-Jun	29-Jun	h	46	127

3100	b	control 2	GEN 3	1779	12-Jun	25-Jun	29-Jun	h	66	132
3100	c	control 2	GEN 3	1969	12-Jun	25-Jun	01-Jul	02-Jul	38	155
3101	a	control 2	GEN 3	492	12-Jun	25-Jun	29-Jun	02-Jul	15	46
3101	b	control 2	GEN 3	939	12-Jun	25-Jun	29-Jun	h	29	159
3101	c	control 2	GEN 3	1803	12-Jun	25-Jun	29-Jun	h	36	165
3102	a	control 2	GEN 3	816	12-Jun	25-Jun	28-Jun	02-Jul	35	75
3102	b	control 2	GEN 3	1325	12-Jun	25-Jun	29-Jun	02-Jul	31	67
3102	c	control 2	GEN 3	1682	12-Jun	25-Jun	29-Jun	02-Jul	49	199
3103	a	control 2	GEN 3	985	12-Jun	25-Jun	29-Jun	01-Jul	22	160
3103	b	control 2	GEN 3	1153	12-Jun	25-Jun	30-Jun	h	33	92
3103	c	control 2	GEN 3	1812	12-Jun	25-Jun	28-Jun	h	43	97
3116	a	control 2	GEN 3	2060	12-Jun	25-Jun	28-Jun	h	45	130
3116	b	control 2	GEN 3	467	12-Jun	25-Jun	28-Jun	h	33	137
3116	c	control 2	GEN 3	159	12-Jun	25-Jun	28-Jun	h	53	152
3117	a	control 2	GEN 3	382	ng	25-Jun		h		
3117	b	control 2	GEN 3	1827	11-Jun	25-Jun	28-Jun	h	61	160
3117	c	control 2	GEN 3	602	11-Jun	25-Jun	28-Jun	h	36	168
3118	a	control 2	GEN 3	90	11-Jun	25-Jun	28-Jun	h	29	172
3118	b	control 2	GEN 3	1153	11-Jun	25-Jun	28-Jun	h	64	169
3118	c	control 2	GEN 3	1655	11-Jun	25-Jun	28-Jun	h	46	176
3119	a	control 2	GEN 3	1979	11-Jun	25-Jun	28-Jun	h	40	45
3119	b	control 2	GEN 3	217	11-Jun	25-Jun	08-Jul	h	64	68
3119	c	control 2	GEN 3	108	11-Jun	25-Jun	09-Jul	h	62	102
3120	a	control 2	GEN 3	655	11-Jun	25-Jun	02-Jul	h	51	169
3120	b	control 2	GEN 3	985	12-Jun	25-Jun	02-Jul	02-Jul	40	152
3120	c	control 2	GEN 3	1552	13-Jun	25-Jun	02-Jul	h	59	172
3121	a	control 2	GEN 3	320	11-Jun	25-Jun	08-Jul	h	32	103
3121	b	control 2	GEN 3	622	11-Jun	25-Jun	06-Jul	h	36	107
3121	c	control 2	GEN 3	2032	11-Jun	25-Jun	06-Jul	h	41	115
3154	a	control 2	GEN 3	1379	11-Jun	25-Jun	06-Jul	h	46	145
3154	b	control 2	GEN 3	496	11-Jun	25-Jun	06-Jul	h	45	153

3154	c	control 2	GEN 3	742	11-Jun	25-Jun	06-Jul	h	43	157
3155	a	control 2	GEN 3	730	11-Jun	25-Jun	06-Jul	h	21	4
3155	b	control 2	GEN 3	615	11-Jun	25-Jun	06-Jul	h	51	38
3155	c	control 2	GEN 3	296	11-Jun	25-Jun	06-Jul	h	52	98
3156	a	control 2	GEN 3	1446	11-Jun	25-Jun	06-Jul	h	30	122
3156	b	control 2	GEN 3	2006	11-Jun	25-Jun	06-Jul	h	29	106
3156	c	control 2	GEN 3	1594	11-Jun	25-Jun	06-Jul	h	52	143
3157	a	control 2	GEN 3	1927	11-Jun	25-Jun	06-Jul	h	40	35
3157	b	control 2	GEN 3	1813	11-Jun	25-Jun	06-Jul	h	51	52
3157	c	control 2	GEN 3	1921	11-Jun	25-Jun	06-Jul	h	23	139
3158	a	control 2	GEN 3	946	11-Jun	25-Jun	08-Jul	h	60	103
3158	b	control 2	GEN 3	1722	11-Jun	25-Jun	08-Jul	h	60	105
3158	c	control 2	GEN 3	125	11-Jun	25-Jun	08-Jul	h	46	236
3159	a	control 2	GEN 3	881	27-Jun	25-Jun	03-Jul	03-Jul	35	231
3159	b	control 2	GEN 3	1878	11-Jun	25-Jun	06-Jul	02-Jul	46	97
3159	c	control 2	GEN 3	1128	11-Jun	25-Jun	07-Jul	03-Jul	52	155
3160	a	control 2	GEN 3	1404	28-Jun	25-Jun	03-Jul	h	42	36
3160	b	control 2	GEN 3	1574	11-Jun	25-Jun	03-Jul	03-Jul	39.5	91
3160	c	control 2	GEN 3	1851	14-Jun	25-Jun	02-Jul	h	46	139
3161	a	control 2	GEN 3	416	12-Jun	25-Jun	04-Jul	h	12	20
3161	b	control 2	GEN 3	1282	12-Jun	25-Jun	06-Jul	h	49	62
3161	c	control 2	GEN 3	963	12-Jun	25-Jun	06-Jul	h	53	75
3162	a	control 2	GEN 3	1480	12-Jun	25-Jun	06-Jul	h	48	47
3162	b	control 2	GEN 3	258	12-Jun	25-Jun	06-Jul	h	56	59
3162	c	control 2	GEN 3	2027	12-Jun	25-Jun	06-Jul	03-Jul	51	106
3211	a	control 2	GEN 3	1018	12-Jun	25-Jun	06-Jul	h	52	191
3211	b	control 2	GEN 3	294	12-Jun	25-Jun	06-Jul	h	52	172
3211	c	control 2	GEN 3	460	ng	25-Jun		h		
3212	a	control 2	GEN 3	824	12-Jun	25-Jun	06-Jul	h	60	118
3212	b	control 2	GEN 3	1175	13-Jun	25-Jun	06-Jul	h	36	137
3212	c	control 2	GEN 3	1593	13-Jun	25-Jun	06-Jul	h	42	148

3108	a	cxc 1	GEN 3	683		08-Jun	25-Jun	03-Jul	h	29	158
3108	b	cxc 1	GEN 3	1168		08-Jun	25-Jun	03-Jul	02-Jul	30	176
3108	c	cxc 1	GEN 3	1026		08-Jun	25-Jun	03-Jul	02-Jul	65	206
3109	a	cxc 1	GEN 3	1509		12-Jun	25-Jun	03-Jul	h	40	214
3109	b	cxc 1	GEN 3	1334		12-Jun	25-Jun	08-Jul	02-Jul	34	115
3109	c	cxc 1	GEN 3	1884		11-Jun	25-Jun	08-Jul	02-Jul	60	117
3110	a	cxc 1	GEN 3	533		11-Jun	25-Jun	07-Jul	02-Jul	29	139
3110	b	cxc 1	GEN 3	522		11-Jun	25-Jun	05-Jul	01-Jul	49	199
3110	c	cxc 1	GEN 3	1994		11-Jun	25-Jun	27-Jun	02-Jul	62	95
3111	a	cxc 1	GEN 3	838		11-Jun	25-Jun	03-Jul	h	25	201
3111	b	cxc 1	GEN 3	948		11-Jun	25-Jun	03-Jul	h	34	185
3111	c	cxc 1	GEN 3	47		11-Jun	25-Jun	03-Jul	h	70	207
3112	a	cxc 1	GEN 3	12		11-Jun	25-Jun	04-Jul	h	40	172
3112	b	cxc 1	GEN 3	590		10-Jun	25-Jun	04-Jul	h	49	221
3112	c	cxc 1	GEN 3	194		10-Jun	25-Jun	05-Jul	h	48	153
3113	a	cxc 1	GEN 3	1386		10-Jun	25-Jun	01-Jul	h	46	218
3113	b	cxc 1	GEN 3	1525		10-Jun	25-Jun	02-Jul	h	38	163
3113	c	cxc 1	GEN 3	1067		10-Jun	25-Jun	02-Jul	h	42	123
3114	a	cxc 1	GEN 3	9		08-Jun	25-Jun	30-Jun	01-Jul	35	116
3114	b	cxc 1	GEN 3	1346		10-Jun	25-Jun	01-Jul	h	32	205
3114	c	cxc 1	GEN 3	1180		10-Jun	25-Jun	01-Jul	h	49	181
3115	a	cxc 1	GEN 3	105		10-Jun	25-Jun	30-Jun	h	50	215
3115	b	cxc 1	GEN 3	390		10-Jun	25-Jun	01-Jul	h	27	147
3115	c	cxc 1	GEN 3	1514		10-Jun	25-Jun	04-Jul	03-Jul	62	113
3200	a	cxc 1	GEN 3	2073		10-Jun	25-Jun	05-Jul	h	43	142
3200	b	cxc 1	GEN 3	1216		10-Jun	25-Jun	06-Jul	03-Jul	33	173
3200	c	cxc 1	GEN 3	638		11-Jun	25-Jun	06-Jul	h	55	114
3201	a	cxc 1	GEN 3	155		10-Jun	25-Jun	01-Jul	h	53	113
3201	b	cxc 1	GEN 3	780		10-Jun	25-Jun	01-Jul	h	44	181
3201	c	cxc 1	GEN 3	1468		10-Jun	25-Jun	30-Jun	h	47	189
3202	a	cxc 1	GEN 3	1866		10-Jun	25-Jun	no	02-Jul	13	

3202	b	cxc 1	GEN 3	503		10-Jun	25-Jun	04-Jul	02-Jul	68	201
3202	c	cxc 1	GEN 3	1629		10-Jun	25-Jun	04-Jul	02-Jul	31	117
3203	a	cxc 1	GEN 3	150		11-Jun	25-Jun	29-Jun	h	54	109
3203	b	cxc 1	GEN 3	1232		09-Jun	25-Jun	28-Jun	01-Jul	52	186
3203	c	cxc 1	GEN 3	116		09-Jun	25-Jun	30-Jun	03-Jul	64	99
3204	a	cxc 1	GEN 3	1661		09-Jun	25-Jun	28-Jun	02-Jul	41	208
3204	b	cxc 1	GEN 3	1792		09-Jun	25-Jun	27-Jun	01-Jul	34	178
3204	c	cxc 1	GEN 3	956		09-Jun	25-Jun	28-Jun	02-Jul	18	95
3205	a	cxc 1	GEN 3	1886		09-Jun	25-Jun	09-Jul	h	31	132
3205	b	cxc 1	GEN 3	1404		09-Jun	25-Jun	10-Jul	h	62	192
3205	c	cxc 1	GEN 3	1203		09-Jun	25-Jun	30-Jun	h	51	230
3216	a	cxc 1	GEN 3	1214		09-Jun	25-Jun	no	02-Jul	21	
3216	b	cxc 1	GEN 3	299		09-Jun	25-Jun	02-Jul	h	64	142
3216	c	cxc 1	GEN 3	1343		09-Jun	25-Jun	02-Jul	h	45	174
3217	a	cxc 1	GEN 3	1603		09-Jun	25-Jun	02-Jul	h	40	130
3217	b	cxc 1	GEN 3	52		09-Jun	25-Jun	02-Jul	h	70	189
3217	c	cxc 1	GEN 3	1348		09-Jun	25-Jun	02-Jul	02-Jul	43	143
3222	a	cxc 1	GEN 3	1072		09-Jun	25-Jun	02-Jul	h	58	214
3222	b	cxc 1	GEN 3	458		09-Jun	25-Jun	02-Jul	02-Jul	34	208
3222	c	cxc 1	GEN 3	1505		09-Jun	25-Jun	02-Jul	h	25	152
3230	a	cxc 1	GEN 3	1617		09-Jun	25-Jun	02-Jul	02-Jul	35	117
3230	b	cxc 1	GEN 3	434		09-Jun	25-Jun	02-Jul	h	47	161
3230	c	cxc 1	GEN 3	2007		09-Jun	25-Jun	02-Jul	02-Jul	53	138
3231	a	cxc 1	GEN 3	1232		10-Jun	25-Jun	04-Jul	h	42	122
3231	b	cxc 1	GEN 3	1676		10-Jun	25-Jun	05-Jul	03-Jul	40	186
3231	c	cxc 1	GEN 3	515		10-Jun	25-Jun	04-Jul	h	64	118
3104	a	cxc 2	GEN 3	171		12-Jun	25-Jun	30-Jun	03-Jul	54	217
3104	b	cxc 2	GEN 3	2097		12-Jun	25-Jun	28-Jun	02-Jul	31	128
3104	c	cxc 2	GEN 3	1931		12-Jun	25-Jun	29-Jun	h	15	152
3105	a	cxc 2	GEN 3	158		12-Jun	25-Jun	08-Jul	h	48	136
3105	b	cxc 2	GEN 3	87		12-Jun	25-Jun	08-Jul	h	68	172

3105	c	cxc 2	GEN 3	216	12-Jun	25-Jun	07-Jul	02-Jul	59	125
3106	a	cxc 2	GEN 3	491	12-Jun	25-Jun	01-Jul	h	10	128
3106	b	cxc 2	GEN 3	1280	12-Jun	25-Jun	02-Jul	h	39	147
3106	c	cxc 2	GEN 3	1690	12-Jun	25-Jun	29-Jun	02-Jul	41	186
3107	a	cxc 2	GEN 3	1926	10-Jun	25-Jun	01-Jul	h	37	186
3107	b	cxc 2	GEN 3	1315	10-Jun	25-Jun	02-Jul	03-Jul	50	101
3107	c	cxc 2	GEN 3	1657	10-Jun	25-Jun	02-Jul	h	55	138
3142	a	cxc 2	GEN 3	1406	10-Jun	25-Jun	02-Jul	03-Jul	32	209
3142	b	cxc 2	GEN 3	2017	10-Jun	25-Jun	02-Jul	h	46	130
3142	c	cxc 2	GEN 3	1121	10-Jun	25-Jun	02-Jul	02-Jul	61	207
3143	a	cxc 2	GEN 3	951	10-Jun	25-Jun	02-Jul	03-Jul	33	207
3143	b	cxc 2	GEN 3	1221	10-Jun	25-Jun	02-Jul	h	32	170
3143	c	cxc 2	GEN 3	661	10-Jun	25-Jun	02-Jul	01-Jul	35	212
3144	a	cxc 2	GEN 3	1234	07-Jun	25-Jun	02-Jul	h	70	235
3144	b	cxc 2	GEN 3	1222	10-Jun	25-Jun	02-Jul	h	27	149
3144	c	cxc 2	GEN 3	1136	10-Jun	25-Jun	02-Jul	02-Jul	24	216
3145	a	cxc 2	GEN 3	749	10-Jun	25-Jun	no	02-Jul	21	
3145	b	cxc 2	GEN 3	1222	10-Jun	25-Jun	09-Jul	h	51	220
3145	c	cxc 2	GEN 3	2026	08-Jun	25-Jun	10-Jul	02-Jul	43	164
3146	a	cxc 2	GEN 3	235	10-Jun	25-Jun	10-Jul	h	35	222
3146	b	cxc 2	GEN 3	249	10-Jun	25-Jun	30-Jun	02-Jul	47	170
3146	c	cxc 2	GEN 3	1047	10-Jun	25-Jun	04-Jul	02-Jul	40	182
3147	a	cxc 2	GEN 3	433	10-Jun	25-Jun	no	01-Jul	14	
3147	b	cxc 2	GEN 3	1800	10-Jun	25-Jun	08-Jul	02-Jul	36	232
3147	c	cxc 2	GEN 3	882	10-Jun	25-Jun	09-Jul	02-Jul	55	126
3148	a	cxc 2	GEN 3	468	10-Jun	25-Jun	05-Jul	02-Jul	27	170
3148	b	cxc 2	GEN 3	1505	10-Jun	25-Jun	08-Jul	h	63	106
3148	c	cxc 2	GEN 3	294	10-Jun	25-Jun	06-Jul	03-Jul	63	232
3149	a	cxc 2	GEN 3	1333	10-Jun	25-Jun	03-Jul	02-Jul	35	158
3149	b	cxc 2	GEN 3	897	10-Jun	25-Jun	03-Jul	01-Jul	40	172
3149	c	cxc 2	GEN 3	521	08-Jun	25-Jun	05-Jul	h	58	109

3150	a	cxc 2	GEN 3	132		10-Jun	25-Jun	no	01-Jul	19	
3150	b	cxc 2	GEN 3	1351		08-Jun	25-Jun	no	02-Jul	20	
3150	c	cxc 2	GEN 3	545		10-Jun	25-Jun	no	02-Jul	17	
3151	a	cxc 2	GEN 3	1948		NG	25-Jun				
3151	b	cxc 2	GEN 3	1421		NG	25-Jun				
3151	c	cxc 2	GEN 3	1328		NG	25-Jun				
3152	a	cxc 2	GEN 3	92		NG	25-Jun				
3152	b	cxc 2	GEN 3	39		10-Jun	25-Jun	04-Jul	h	43	217
3152	c	cxc 2	GEN 3	736		NG	25-Jun				
3196	a	cxc 2	GEN 3	1333		10-Jun	25-Jun	08-Jul	03-Jul	23	140
3196	b	cxc 2	GEN 3	630		10-Jun	25-Jun	09-Jul	h	41	212
3196	c	cxc 2	GEN 3	832		10-Jun	25-Jun	08-Jul	h	63	178
3197	a	cxc 2	GEN 3	1852		08-Jun	25-Jun	06-Jul	h	33	226
3197	b	cxc 2	GEN 3	1016		12-Jun	25-Jun	no	02-Jul	18	
3197	c	cxc 2	GEN 3	1541		12-Jun	25-Jun	no	02-Jul	20	
3198	a	cxc 2	GEN 3	618		11-Jun	25-Jun	10-Jul	03-Jul	51	124
3198	b	cxc 2	GEN 3	524		11-Jun	25-Jun	10-Jul	01-Jul	30	196
3198	c	cxc 2	GEN 3	1220		11-Jun	25-Jun	10-Jul	h	39	194
3199	a	cxc 2	GEN 3	1466		11-Jun	25-Jun	06-Jul	h	24	221
3199	b	cxc 2	GEN 3	1468		11-Jun	25-Jun	08-Jul	02-Jul	31	161
3199	c	cxc 2	GEN 3	143		11-Jun	25-Jun	08-Jul	02-Jul	22	108
3213	a	cxc 2	GEN 3	1510		11-Jun	25-Jun	10-Jul	h	52	147
3213	b	cxc 2	GEN 3	1192		11-Jun	25-Jun	09-Jul	h	22	209
3213	c	cxc 2	GEN 3	1402		11-Jun	25-Jun	09-Jul	h	40	212
3214	a	cxc 2	GEN 3	2058		11-Jun	25-Jun	08-Jul	02-Jul	35	168
3214	b	cxc 2	GEN 3	59		11-Jun	25-Jun	07-Jul	02-Jul	22	124
3214	c	cxc 2	GEN 3	1930		11-Jun	25-Jun	05-Jul	h	35	218
3215	a	cxc 2	GEN 3	1701		11-Jun	25-Jun	no	01-Jul	20	
3215	b	cxc 2	GEN 3	2066		11-Jun	25-Jun	04-Jul	h	56	111
3215	c	cxc 2	GEN 3	1623		11-Jun	25-Jun	04-Jul	h	42	222
3227	a	cxc 2	GEN 3	1822		11-Jun	25-Jun	03-Jul	h	36	178

3227	b	cxc 2	GEN 3	1358		11-Jun	25-Jun	02-Jul	h	64	174
3227	c	cxc 2	GEN 3	1949		11-Jun	25-Jun	29-Jun	02-Jul	27	182
3232	a	cxc 2	GEN 3	576		11-Jun	25-Jun	30-Jun	h	52	174
3232	b	cxc 2	GEN 3	706		11-Jun	25-Jun	02-Jul	h	56	223
3232	c	cxc 2	GEN 3	721		11-Jun	25-Jun	01-Jul	h	52	236
2946	a	spring 1	GEN 3	717		08-Jun	25-Jun	26-Jun	02-Jul	39	191
2946	b	spring 1	GEN 3	1835		08-Jun	25-Jun	26-Jun	02-Jul	24	105
2946	c	spring 1	GEN 3	1674		08-Jun	25-Jun	26-Jun	02-Jul	23	123
2947	a	spring 1	GEN 3	686		08-Jun	25-Jun	26-Jun	h	21	133
2947	b	spring 1	GEN 3	1082		08-Jun	25-Jun	02-Jul	h	36	213
2947	c	spring 1	GEN 3	618		08-Jun	25-Jun	30-Jun	02-Jul	37	109
2948	a	spring 1	GEN 3	892		08-Jun	25-Jun	30-Jun	02-Jul	48	213
2948	b	spring 1	GEN 3	639		08-Jun	25-Jun	30-Jun	02-Jul	50	152
2948	c	spring 1	GEN 3	789		08-Jun	25-Jun	30-Jun	02-Jul	27	202
2949	a	spring 1	GEN 3	276		08-Jun	25-Jun	25-Jun	02-Jul	28	131
2949	b	spring 1	GEN 3	1385		08-Jun	25-Jun	25-Jun	02-Jul	31	99
2949	c	spring 1	GEN 3	448		08-Jun	25-Jun	27-Jun	02-Jul	31	206
2950	a	spring 1	GEN 3	1052		08-Jun	25-Jun	30-Jun	01-Jul	27	132
2950	b	spring 1	GEN 3	1254		08-Jun	25-Jun	04-Jul	h	67	163
2950	c	spring 1	GEN 3	1216		08-Jun	25-Jun	27-Jun	h	32	202
2951	a	spring 1	GEN 3	1081		08-Jun	25-Jun	24-Jun	02-Jul	30	170
2951	b	spring 1	GEN 3	1663		08-Jun	25-Jun	26-Jun	h	30	228
2951	c	spring 1	GEN 3	1693		08-Jun	25-Jun	27-Jun	02-Jul	69	204
2952	a	spring 1	GEN 3	38		08-Jun	25-Jun	28-Jun	h	37	226
2952	b	spring 1	GEN 3	2086		08-Jun	25-Jun	30-Jun	h	36	201
2952	c	spring 1	GEN 3	311		08-Jun	25-Jun	30-Jun	h	31	169
2953	a	spring 1	GEN 3	1590		08-Jun	25-Jun	29-Jun	h	35	203
2953	b	spring 1	GEN 3	928		08-Jun	25-Jun	29-Jun	02-Jul	32	203
2953	c	spring 1	GEN 3	915		08-Jun	25-Jun	29-Jun	03-Jul	34	130
2954	a	spring 1	GEN 3	918		10-Jun	25-Jun	29-Jun	02-Jul	35	131
2954	b	spring 1	GEN 3	1730		10-Jun	25-Jun	29-Jun	02-Jul	32	130

2954	c	spring 1	GEN 3	373		10-Jun	25-Jun	29-Jun	02-Jul	38	174
2955	a	spring 1	GEN 3	750		07-Jun	25-Jun	25-Jun	02-Jul	28	92
2955	b	spring 1	GEN 3	1234		07-Jun	25-Jun	26-Jun	02-Jul	41	177
2955	c	spring 1	GEN 3	1108		07-Jun	25-Jun	28-Jun	01-Jul	49	99
2956	a	spring 1	GEN 3	1		07-Jun	25-Jun	24-Jun	02-Jul	26	92
2956	b	spring 1	GEN 3	1445		07-Jun	25-Jun	25-Jun	02-Jul	26	112
2956	c	spring 1	GEN 3	842		07-Jun	25-Jun	25-Jun	02-Jul	29	90
2957	a	spring 1	GEN 3	319		07-Jun	25-Jun	26-Jun	02-Jul	29	128
2957	b	spring 1	GEN 3	226		07-Jun	25-Jun	24-Jun	02-Jul	34.5	95
2957	c	spring 1	GEN 3	437		07-Jun	25-Jun	24-Jun	02-Jul	24	22
2958	a	spring 1	GEN 3	1246		07-Jun	25-Jun	26-Jun	02-Jul	24	104
2958	b	spring 1	GEN 3	588		07-Jun	25-Jun	26-Jun	02-Jul	28	143
2958	c	spring 1	GEN 3	2067		07-Jun	25-Jun	24-Jun	02-Jul	20	98
2959	a	spring 1	GEN 3	931		10-Jun	25-Jun	24-Jun	02-Jul	35.7	126
2959	b	spring 1	GEN 3	1727		10-Jun	25-Jun	24-Jun	02-Jul	30	137
2959	c	spring 1	GEN 3	1103		07-Jun	25-Jun	24-Jun	02-Jul	24	74
2960	a	spring 1	GEN 3	130		10-Jun	25-Jun	24-Jun	02-Jul	28.5	124
2960	b	spring 1	GEN 3	217		10-Jun	25-Jun	24-Jun	02-Jul	20.5	57
2960	c	spring 1	GEN 3	80		10-Jun	25-Jun	25-Jun	02-Jul	25	219
2961	a	spring 1	GEN 3	628		07-Jun	25-Jun	30-Jun	02-Jul	52	97
2961	b	spring 1	GEN 3	927		07-Jun	25-Jun	30-Jun	02-Jul	63	211
2961	c	spring 1	GEN 3	425		07-Jun	25-Jun	28-Jun	01-Jul	61	154
2962	a	spring 1	GEN 3	695		08-Jun	25-Jun	25-Jun	02-Jul	18	182
2962	b	spring 1	GEN 3	223		08-Jun	25-Jun	27-Jun	h	28	176
2962	c	spring 1	GEN 3	503		08-Jun	25-Jun	25-Jun	02-Jul	31	196
2963	a	spring 1	GEN 3	1113		08-Jun	25-Jun	25-Jun	h	32	115
2963	b	spring 1	GEN 3	1289		08-Jun	25-Jun	25-Jun	h	43	104
2963	c	spring 1	GEN 3	1739		08-Jun	25-Jun	25-Jun	03-Jul	25.8	104
2964	a	spring 1	GEN 3	1867		08-Jun	25-Jun	25-Jun	h	48	197
2964	b	spring 1	GEN 3	133		08-Jun	25-Jun	01-Jul	h	42	232
2964	c	spring 1	GEN 3	1038		08-Jun	25-Jun	25-Jun	02-Jul	31	226

2965	a	spring 1	GEN 3	1904		08-Jun	25-Jun	25-Jun	h	32	157
2965	b	spring 1	GEN 3	199		08-Jun	25-Jun	25-Jun	02-Jul	31	151
2965	c	spring 1	GEN 3	1826		08-Jun	25-Jun	28-Jun	h	50	167
3067	a	spring 1	GEN 3	1627		08-Jun	25-Jun	01-Jul	01-Jul	33	199
3067	b	spring 1	GEN 3	1848		08-Jun	25-Jun	30-Jun	h	34	196
3067	c	spring 1	GEN 3	135		08-Jun	25-Jun	30-Jun	02-Jul	31	110
3068	a	spring 1	GEN 3	1708		08-Jun	25-Jun	30-Jun	h	36	128
3068	b	spring 1	GEN 3	248		08-Jun	25-Jun	30-Jun	h	27	228
3068	c	spring 1	GEN 3	952		08-Jun	25-Jun	28-Jun	h	35	113
3069	a	spring 1	GEN 3	1593		08-Jun	25-Jun	28-Jun	h	35	219
3069	b	spring 1	GEN 3	1202		08-Jun	25-Jun	28-Jun	h	37	164
3069	c	spring 1	GEN 3	1604		10-Jun	25-Jun	28-Jun	h	32	141
3070	a	spring 1	GEN 3	424		14-Jun	25-Jun	28-Jun	h	34	209
3070	b	spring 1	GEN 3	1215		15-Jun	25-Jun	30-Jun	h	30	192
3070	c	spring 1	GEN 3	50		10-Jun	25-Jun	01-Jul	h	33	154
2925	a	spring 2	GEN 3	1861		07-Jun	25-Jun	25-Jun	01-Jul	25	98
2925	b	spring 2	GEN 3	2028		10-Jun	25-Jun	29-Jun	h	66	185
2925	c	spring 2	GEN 3	1468		07-Jun	25-Jun	29-Jun	h	39	51
2926	a	spring 2	GEN 3	1792		10-Jun	25-Jun	29-Jun	h	32	143
2926	b	spring 2	GEN 3	1012		08-Jun	25-Jun	29-Jun	h	19	125
2926	c	spring 2	GEN 3	592		08-Jun	25-Jun	29-Jun	h	22	127
2927	a	spring 2	GEN 3	1845		10-Jun	25-Jun	28-Jun	h	40.5	145
2927	b	spring 2	GEN 3	1266		07-Jun	25-Jun	28-Jun	h	31	45
2927	c	spring 2	GEN 3	955		07-Jun	25-Jun	26-Jun	03-Jul	25	26
2928	a	spring 2	GEN 3	840		16-Jun	25-Jun	28-Jun	h	30	137
2928	b	spring 2	GEN 3	1799		10-Jun	25-Jun	28-Jun	h	26	102
2928	c	spring 2	GEN 3	124		17-Jun	25-Jun	28-Jun	h	30	129
2929	a	spring 2	GEN 3	476		10-Jun	25-Jun	29-Jun	03-Jul	28	104
2929	b	spring 2	GEN 3	752		10-Jun	25-Jun	28-Jun	h	36	196
2929	c	spring 2	GEN 3	1574		10-Jun	25-Jun	29-Jun	h	37	139
2930	a	spring 2	GEN 3	1879		07-Jun	25-Jun	28-Jun	h	22	91

2930	b	spring 2	GEN 3	1571	07-Jun	25-Jun	29-Jun	h	22	87
2930	c	spring 2	GEN 3	1026	07-Jun	25-Jun	28-Jun	03-Jul	35	96
2931	a	spring 2	GEN 3	1950	07-Jun	25-Jun	28-Jun	03-Jul	36	112
2931	b	spring 2	GEN 3	1196	07-Jun	25-Jun	28-Jun	03-Jul	21.5	42
2931	c	spring 2	GEN 3	768	07-Jun	25-Jun	29-Jun	h	38	129
2932	a	spring 2	GEN 3	777	07-Jun	25-Jun	30-Jun	h	24	86
2932	b	spring 2	GEN 3	43	07-Jun	25-Jun	24-Jun	03-Jul	28	28
2932	c	spring 2	GEN 3	1208	07-Jun	25-Jun	26-Jun	h	38	119
2933	a	spring 2	GEN 3	254	07-Jun	25-Jun	25-Jun	01-Jul	32	96
2933	b	spring 2	GEN 3	551	07-Jun	25-Jun	26-Jun	h	41	150
2933	c	spring 2	GEN 3	287	10-Jun	25-Jun	28-Jun	01-Jul	55	142
2934	a	spring 2	GEN 3	1196	07-Jun	25-Jun	dead			
2934	b	spring 2	GEN 3	1841	07-Jun	25-Jun	26-Jun	01-Jul	10	3
2934	c	spring 2	GEN 3	891	07-Jun	25-Jun	27-Jun	01-Jul	33	210
2935	a	spring 2	GEN 3	249	08-Jun	25-Jun	27-Jun	01-Jul	34	231
2935	b	spring 2	GEN 3	6	08-Jun	25-Jun	27-Jun	01-Jul	22	101
2935	c	spring 2	GEN 3	413	08-Jun	25-Jun	27-Jun	01-Jul	17	6
2936	a	spring 2	GEN 3	1346	18-Jun	25-Jun	01-Jul	h	21	59
2936	b	spring 2	GEN 3	293	12-Jun	25-Jun	28-Jun	h	25	82
2936	c	spring 2	GEN 3	990	ng	25-Jun				
2937	a	spring 2	GEN 3	749	10-Jun	25-Jun	25-Jun	h	41	199
2937	b	spring 2	GEN 3	245	08-Jun	25-Jun	25-Jun	03-Jul	36	187
2937	c	spring 2	GEN 3	285	08-Jun	25-Jun	25-Jun	h	38	98
2938	a	spring 2	GEN 3	368	08-Jun	25-Jun	25-Jun	01-Jul	16	27
2938	b	spring 2	GEN 3	1568	08-Jun	25-Jun	01-Jul	h	32	101
2938	c	spring 2	GEN 3	706	08-Jun	25-Jun	27-Jun	01-Jul	49	188
2939	a	spring 2	GEN 3	1601	07-Jun	25-Jun	01-Jul	h	35	107
2939	b	spring 2	GEN 3	1769	07-Jun	25-Jun	28-Jun	01-Jul	57	100
2939	c	spring 2	GEN 3	738	07-Jun	25-Jun	28-Jun	01-Jul	49	202
2940	a	spring 2	GEN 3	1579	11-Jun	25-Jun	28-Jun	02-Jul	67	113
2940	b	spring 2	GEN 3	617	29-Jun	25-Jun	01-Jul	h	40	116

2940	c	spring 2	GEN 3	1908	09-Jun	25-Jun	27-Jun	01-Jul	34	234
2941	a	spring 2	GEN 3	368	10-Jun	25-Jun	01-Jul	02-Jul	62	44
2941	b	spring 2	GEN 3	1577	10-Jun	25-Jun	27-Jun	h	33	73
2941	c	spring 2	GEN 3	759	10-Jun	25-Jun	29-Jun	h	38	82
2942	a	spring 2	GEN 3	1731	30-Jun	25-Jun	01-Jul	h	27.8	238
2942	b	spring 2	GEN 3	1322	09-Jun	25-Jun	27-Jun	h	47	152
2942	c	spring 2	GEN 3	227	10-Jun	25-Jun	27-Jun	03-Jul	33	126
2943	a	spring 2	GEN 3	1916	19-Jun	25-Jun	30-Jun	h	28.5	58
2943	b	spring 2	GEN 3	2055	ng	25-Jun				
2943	c	spring 2	GEN 3	765	ng	25-Jun				
2944	a	spring 2	GEN 3	426	08-Jun	25-Jun	27-Jun	01-Jul	30	81
2944	b	spring 2	GEN 3	1006	08-Jun	25-Jun	30-Jun	03-Jul	39.5	96
2944	c	spring 2	GEN 3	1327	08-Jun	25-Jun	27-Jun	h	27	100
2945	a	spring 2	GEN 3	675	07-Jun	25-Jun	27-Jun	01-Jul	25	32
2945	b	spring 2	GEN 3	344	10-Jun	25-Jun	04-Jul	h	41	104
2945	c	spring 2	GEN 3	622	08-Jun	25-Jun	27-Jun	01-Jul	20.5	33
2966	a	sxs 1	GEN 3	553	10-Jun	25-Jun	27-Jun	01-Jul	22	122
2966	b	sxs 1	GEN 3	1715	10-Jun	25-Jun	27-Jun	03-Jul	38	224
2966	c	sxs 1	GEN 3	1163	08-Jun	25-Jun	27-Jun	03-Jul	21	109
2967	a	sxs 1	GEN 3	1196	20-Jun	25-Jun	30-Jun	h	57	30
2967	b	sxs 1	GEN 3	924	09-Jun	25-Jun	27-Jun	h	60	42
2967	c	sxs 1	GEN 3	1395	09-Jun	25-Jun	27-Jun	03-Jul	30	31
2968	a	sxs 1	GEN 3	386	08-Jun	25-Jun	27-Jun	03-Jul	33	176
2968	b	sxs 1	GEN 3	390	08-Jun	25-Jun	26-Jun	01-Jul	28	53
2968	c	sxs 1	GEN 3	1899	08-Jun	25-Jun	28-Jun	03-Jul	36	151
2969	a	sxs 1	GEN 3	1473	08-Jun	25-Jun	27-Jun	02-Jul	33	111
2969	b	sxs 1	GEN 3	842	08-Jun	25-Jun	26-Jun	02-Jul	10	22
2969	c	sxs 1	GEN 3	928	08-Jun	25-Jun	27-Jun	02-Jul	31	81
2970	a	sxs 1	GEN 3	118	08-Jun	25-Jun	26-Jun	02-Jul	30	101
2970	b	sxs 1	GEN 3	2051	08-Jun	25-Jun	28-Jun	02-Jul	30	108
2970	c	sxs 1	GEN 3	139	08-Jun	25-Jun	24-Jun	01-Jul	0	97

2971	a	sxs 1	GEN 3	1502		10-Jun	25-Jun	26-Jun	02-Jul	29	88
2971	b	sxs 1	GEN 3	27		10-Jun	25-Jun	26-Jun	02-Jul	37.6	67
2971	c	sxs 1	GEN 3	2073		11-Jun	25-Jun	26-Jun	02-Jul	32	63
2972	a	sxs 1	GEN 3	1039		08-Jun	25-Jun	28-Jun	02-Jul	35.5	168
2972	b	sxs 1	GEN 3	992		08-Jun	25-Jun	25-Jun	h	35	100
2972	c	sxs 1	GEN 3	75		08-Jun	25-Jun	26-Jun	01-Jul	27	10
2973	a	sxs 1	GEN 3	1796		10-Jun	25-Jun	27-Jun	02-Jul	58	90
2973	b	sxs 1	GEN 3	1041		10-Jun	25-Jun	27-Jun	03-Jul	46	260
2973	c	sxs 1	GEN 3	758		10-Jun	25-Jun	27-Jun	02-Jul	26	178
2974	a	sxs 1	GEN 3	345		10-Jun	25-Jun	27-Jun	02-Jul	38	181
2974	b	sxs 1	GEN 3	1192		10-Jun	25-Jun	27-Jun	02-Jul	36	91
2974	c	sxs 1	GEN 3	1249		10-Jun	25-Jun	30-Jun	h	35	87
2975	a	sxs 1	GEN 3	2100		10-Jun	25-Jun	27-Jun	01-Jul	18	11
2975	b	sxs 1	GEN 3	410		10-Jun	25-Jun	25-Jun	02-Jul	30	15
2975	c	sxs 1	GEN 3	470		10-Jun	25-Jun	27-Jun	02-Jul	30	52
2976	a	sxs 1	GEN 3	1754		10-Jun	25-Jun	28-Jun	02-Jul	18	22
2976	b	sxs 1	GEN 3	1041		07-Jun	25-Jun	27-Jun	01-Jul	17	38
2976	c	sxs 1	GEN 3	420		10-Jun	25-Jun	27-Jun	02-Jul	36	100
2977	a	sxs 1	GEN 3	1559		13-Jun	25-Jun	27-Jun	02-Jul	18	25
2977	b	sxs 1	GEN 3	1588		14-Jun	25-Jun	27-Jun	02-Jul	21	17
2977	c	sxs 1	GEN 3	330		15-Jun	25-Jun	27-Jun	02-Jul	15	26
2978	a	sxs 1	GEN 3	517		09-Jun	25-Jun	27-Jun	03-Jul	37	202
2978	b	sxs 1	GEN 3	385		10-Jun	25-Jun	28-Jun	02-Jul	14	171
2978	c	sxs 1	GEN 3	1583		10-Jun	25-Jun	30-Jun	02-Jul	69	181
2979	a	sxs 1	GEN 3	1837		10-Jun	25-Jun	27-Jun	01-Jul	27	189
2979	b	sxs 1	GEN 3	1252		21-Jun	25-Jun	30-Jun	03-Jul	39	112
2979	c	sxs 1	GEN 3	1928		07-Jun	25-Jun	02-Jul	03-Jul	33	153
2980	a	sxs 1	GEN 3	466		09-Jun	25-Jun	27-Jun	03-Jul	37	177
2980	b	sxs 1	GEN 3	1540		09-Jun	25-Jun	27-Jun	03-Jul	22	207
2980	c	sxs 1	GEN 3	1454		10-Jun	25-Jun	27-Jun	02-Jul	40	233
2981	a	sxs 1	GEN 3	555		08-Jun	25-Jun	27-Jun	01-Jul	38	201

2981	b	sxs 1	GEN 3	938		12-Jun	25-Jun	28-Jun	03-Jul	46	145
2981	c	sxs 1	GEN 3	1130		10-Jun	25-Jun	26-Jun	03-Jul	28	144
2982	a	sxs 1	GEN 3	798		16-Jun	25-Jun	27-Jun	03-Jul	30	129
2982	b	sxs 1	GEN 3	1414		15-Jun	25-Jun	29-Jun	h	43	59
2982	c	sxs 1	GEN 3	995		10-Jun	25-Jun	27-Jun	02-Jul	27	183
2983	a	sxs 1	GEN 3	1341		10-Jun	25-Jun	25-Jun	03-Jul	28	71
2983	b	sxs 1	GEN 3	1392		10-Jun	25-Jun	26-Jun	01-Jul	54	217
2983	c	sxs 1	GEN 3	154		08-Jun	25-Jun	27-Jun	03-Jul	36	161
2984	a	sxs 1	GEN 3	81		22-Jun	25-Jun	30-Jun	03-Jul	35.5	228
2984	b	sxs 1	GEN 3	676		23-Jun	25-Jun	30-Jun	03-Jul	34	148
2984	c	sxs 1	GEN 3	1615		10-Jun	25-Jun	28-Jun	02-Jul	37	169
2985	a	sxs 1	GEN 3	1172		07-Jun	25-Jun	27-Jun	02-Jul	24	142
2985	b	sxs 1	GEN 3	2037		09-Jun	25-Jun	27-Jun	02-Jul	22	18
2985	c	sxs 1	GEN 3	77		07-Jun	25-Jun	01-Jul	03-Jul	39	205
2986	a	sxs 1	GEN 3	1574		07-Jun	25-Jun	26-Jun	02-Jul	20	36
2986	b	sxs 1	GEN 3	447		07-Jun	25-Jun	26-Jun	02-Jul	24	48
2986	c	sxs 1	GEN 3	389		07-Jun	25-Jun	25-Jun	01-Jul	40	98
2987	a	sxs 1	GEN 3	1304		10-Jun	25-Jun	28-Jun	03-Jul	36	190
2987	b	sxs 1	GEN 3	1857		10-Jun	25-Jun	27-Jun	02-Jul	26	15
2987	c	sxs 1	GEN 3	343		08-Jun	25-Jun	27-Jun	02-Jul	34	66
2988	a	sxs 2	GEN 3	399		07-Jun	25-Jun	27-Jun	02-Jul	16	103
2988	b	sxs 2	GEN 3	497		07-Jun	25-Jun	27-Jun	02-Jul	16	101
2988	c	sxs 2	GEN 3	343		07-Jun	25-Jun	27-Jun	02-Jul	16	102
2989	a	sxs 2	GEN 3	1211		07-Jun	25-Jun	26-Jun	02-Jul	18	73
2989	b	sxs 2	GEN 3	1747		07-Jun	25-Jun	27-Jun	02-Jul	18	10
2989	c	sxs 2	GEN 3	168		07-Jun	25-Jun	27-Jun	01-Jul	22	148
2990	a	sxs 2	GEN 3	976		10-Jun	25-Jun	27-Jun	02-Jul	26	62
2990	b	sxs 2	GEN 3	1003		07-Jun	25-Jun	28-Jun	02-Jul	18	46
2990	c	sxs 2	GEN 3	62		08-Jun	25-Jun	27-Jun	02-Jul	19	37
2991	a	sxs 2	GEN 3	7		08-Jun	25-Jun	27-Jun	01-Jul	35	177
2991	b	sxs 2	GEN 3	2070		10-Jun	25-Jun	27-Jun	01-Jul	35	209

2991	c	sxs 2	GEN 3	1242		08-Jun	25-Jun	27-Jun	02-Jul	27.5	58
2992	a	sxs 2	GEN 3	848		24-Jun	25-Jun	30-Jun	02-Jul	19	119
2992	b	sxs 2	GEN 3	519		07-Jun	25-Jun	28-Jun	h	20	156
2992	c	sxs 2	GEN 3	143		07-Jun	25-Jun	27-Jun	02-Jul	21	236
2993	a	sxs 2	GEN 3	278		07-Jun	25-Jun	27-Jun	03-Jul	20	188
2993	b	sxs 2	GEN 3	417		07-Jun	25-Jun	27-Jun	03-Jul	28	162
2993	c	sxs 2	GEN 3	1603		07-Jun	25-Jun	28-Jun	02-Jul	65	224
2994	a	sxs 2	GEN 3	1596		07-Jun	25-Jun	28-Jun	03-Jul	18.5	187
2994	b	sxs 2	GEN 3	462		07-Jun	25-Jun	26-Jun	02-Jul	24	208
2994	c	sxs 2	GEN 3	1547		07-Jun	25-Jun	26-Jun	03-Jul	16.5	234
2995	a	sxs 2	GEN 3	603		08-Jun	25-Jun	27-Jun	01-Jul	63	188
2995	b	sxs 2	GEN 3	1747		07-Jun	25-Jun	27-Jun	02-Jul	33	194
2995	c	sxs 2	GEN 3	169		08-Jun	25-Jun	27-Jun	02-Jul	61	155
2996	a	sxs 2	GEN 3	1246		07-Jun	25-Jun	25-Jun	02-Jul	22	217
2996	b	sxs 2	GEN 3	460		07-Jun	25-Jun	25-Jun	02-Jul	66	175
2996	c	sxs 2	GEN 3	813		08-Jun	25-Jun	27-Jun	03-Jul	28	161
2997	a	sxs 2	GEN 3	1074		07-Jun	25-Jun	28-Jun	01-Jul	66	104
2997	b	sxs 2	GEN 3	1316		07-Jun	25-Jun	25-Jun	02-Jul	60	99
2997	c	sxs 2	GEN 3	659		07-Jun	25-Jun	28-Jun	02-Jul	55	225
2998	a	sxs 2	GEN 3	1607		08-Jun	25-Jun	25-Jun	02-Jul	24	164
2998	b	sxs 2	GEN 3	1274		08-Jun	25-Jun	27-Jun	03-Jul	37	142
2998	c	sxs 2	GEN 3	999		08-Jun	25-Jun	27-Jun	02-Jul	53	181
2999	a	sxs 2	GEN 3	1439		08-Jun	25-Jun	28-Jun	02-Jul	40	138
2999	b	sxs 2	GEN 3	15		08-Jun	25-Jun	28-Jun	01-Jul	23	213
2999	c	sxs 2	GEN 3	1790		08-Jun	25-Jun	30-Jun	02-Jul	24	216
3000	a	sxs 2	GEN 3	1177		08-Jun	25-Jun	30-Jun	02-Jul	22	147
3000	b	sxs 2	GEN 3	1339		07-Jun	25-Jun	27-Jun	03-Jul	41	159
3000	c	sxs 2	GEN 3	1999		01-Jun	25-Jun	30-Jun	02-Jul	39	163
3001	a	sxs 2	GEN 3	767		07-Jun	25-Jun	26-Jun	01-Jul	56	193
3001	b	sxs 2	GEN 3	1450		07-Jun	25-Jun	28-Jun	02-Jul	26	42
3001	c	sxs 2	GEN 3	1162		07-Jun	25-Jun	26-Jun	02-Jul	15	59

3002	a	sxs 2	GEN 3	580		07-Jun	25-Jun	26-Jun	02-Jul	24	41
3002	b	sxs 2	GEN 3	858		07-Jun	25-Jun	28-Jun	02-Jul	30	36
3002	c	sxs 2	GEN 3	962		07-Jun	25-Jun	27-Jun	02-Jul	28	31
3003	a	sxs 2	GEN 3	944		07-Jun	25-Jun	27-Jun	02-Jul	24	58
3003	b	sxs 2	GEN 3	517		07-Jun	25-Jun	28-Jun	02-Jul	25	42
3003	c	sxs 2	GEN 3	1524		07-Jun	25-Jun	28-Jun	02-Jul	26	59
3004	a	sxs 2	GEN 3	1624		07-Jun	25-Jun	27-Jun	02-Jul	33	156
3004	b	sxs 2	GEN 3	619		07-Jun	25-Jun	27-Jun	02-Jul	31	49
3004	c	sxs 2	GEN 3	314		07-Jun	25-Jun	27-Jun	02-Jul	28	61
3005	a	sxs 2	GEN 3	565		07-Jun	25-Jun	26-Jun	02-Jul	12	26
3005	b	sxs 2	GEN 3	1604		07-Jun	25-Jun	27-Jun	h	41	157
3005	c	sxs 2	GEN 3	1310		07-Jun	25-Jun	27-Jun	02-Jul	30	27
3006	a	sxs 2	GEN 3	1819		07-Jun	25-Jun	27-Jun	02-Jul	24	70
3006	b	sxs 2	GEN 3	468		08-Jun	25-Jun	27-Jun	01-Jul	53	216
3006	c	sxs 2	GEN 3	1485		16-Jun	25-Jun	27-Jun	02-Jul	12	52
3007	a	sxs 2	GEN 3	1194		07-Jun	25-Jun	27-Jun	01-Jul	46	172
3007	b	sxs 2	GEN 3	500		07-Jun	25-Jun	27-Jun	02-Jul	30	39
3007	c	sxs 2	GEN 3	1661		07-Jun	25-Jun	28-Jun	02-Jul	29	73
3008	a	sxs 2	GEN 3	1480		08-Jun	25-Jun	27-Jun	02-Jul	30	54
3008	b	sxs 2	GEN 3	734		08-Jun	25-Jun	27-Jun	02-Jul	29	46
3008	c	sxs 2	GEN 3	784		07-Jun	25-Jun	27-Jun	02-Jul	25	71
3009	a	sxs 2	GEN 3	1847		08-Jun	25-Jun	26-Jun	h	38	172
3009	b	sxs 2	GEN 3	425		08-Jun	25-Jun	27-Jun	03-Jul	34	168
3009	c	sxs 2	GEN 3	368		10-Jun	25-Jun	27-Jun	h	40	217
3010	a	sxs 2	GEN 3	333		10-Jun	25-Jun	26-Jun	02-Jul	67	109
3010	b	sxs 2	GEN 3	1515		08-Jun	25-Jun	27-Jun	02-Jul	66	149
3010	c	sxs 2	GEN 3	1090		08-Jun	25-Jun	27-Jun	01-Jul	68	98
3011	a	sxs 2	GEN 3	893		02-Jun	25-Jun	30-Jun	h	32	176
3011	b	sxs 2	GEN 3	522		03-Jun	25-Jun	30-Jun	03-Jul	43.5	175
3011	c	sxs 2	GEN 3	1077		08-Jun	25-Jun	27-Jun	h	34	158
3045	a	sxw 1	GEN 3	1382		10-Jun	25-Jun	27-Jun	h	30	131

3045	b	sxw 1	GEN 3	1966		10-Jun	25-Jun	05-Jul	h	33	180
3045	c	sxw 1	GEN 3	936		10-Jun	25-Jun	30-Jun	03-Jul	24.5	218
3046	a	sxw 1	GEN 3	1017		10-Jun	25-Jun	03-Jul	h	38	153
3046	b	sxw 1	GEN 3	1548		08-Jun	25-Jun	27-Jun	h	36	127
3046	c	sxw 1	GEN 3	380		10-Jun	25-Jun	05-Jul	h	37	136
3047	a	sxw 1	GEN 3	2027		08-Jun	25-Jun	04-Jul	h	40	187
3047	b	sxw 1	GEN 3	599		08-Jun	25-Jun	04-Jul	h	37	134
3047	c	sxw 1	GEN 3	749		08-Jun	25-Jun	02-Jul	03-Jul	35.5	172
3048	a	sxw 1	GEN 3	785		08-Jun	25-Jun	27-Jun	01-Jul	58	114
3048	b	sxw 1	GEN 3	1221		10-Jun	25-Jun	30-Jun	h	40	45
3048	c	sxw 1	GEN 3	1240		08-Jul	25-Jun	01-Jul	h	44	121
3049	a	sxw 1	GEN 3	894		04-Jul	25-Jun	30-Jun	h	45	147
3049	b	sxw 1	GEN 3	2035		10-Jun	25-Jun	27-Jun	02-Jul	51	126
3049	c	sxw 1	GEN 3	197		10-Jun	25-Jun	04-Jul	03-Jul	38.5	200
3050	a	sxw 1	GEN 3	1073		07-Jun	25-Jun	27-Jun	02-Jul	22	10
3050	b	sxw 1	GEN 3	130		07-Jun	25-Jun	28-Jun	02-Jul	18	15
3050	c	sxw 1	GEN 3	945		07-Jun	25-Jun	27-Jun	03-Jul	42	35
3051	a	sxw 1	GEN 3	1633		08-Jun	25-Jun	27-Jun	03-Jul	44	205
3051	b	sxw 1	GEN 3	1980		08-Jun	25-Jun	27-Jun	03-Jul	33	35
3051	c	sxw 1	GEN 3	383		07-Jun	25-Jun	26-Jun	01-Jul	70	148
3052	a	sxw 1	GEN 3	1825		07-Jun	25-Jun	28-Jun	03-Jul	37	101
3052	b	sxw 1	GEN 3	274		08-Jun	25-Jun	27-Jun	h	38	127
3052	c	sxw 1	GEN 3	1284		07-Jun	25-Jun	27-Jun	03-Jul	35	26
3053	a	sxw 1	GEN 3	1606		08-Jun	25-Jun	27-Jun	03-Jul	17	240
3053	b	sxw 1	GEN 3	1995		08-Jun	25-Jun	28-Jun	03-Jul	36	116
3053	c	sxw 1	GEN 3	1019		08-Jun	25-Jun	28-Jun	01-Jul	41	206
3054	a	sxw 1	GEN 3	253		07-Jun	25-Jun	25-Jun	02-Jul	26	86
3054	b	sxw 1	GEN 3	1596		07-Jun	25-Jun	26-Jun	h	38	97
3054	c	sxw 1	GEN 3	2094		07-Jun	25-Jun	28-Jun	03-Jul	32	93
3055	a	sxw 1	GEN 3	1474		07-Jun	25-Jun	27-Jun	02-Jul	30	8
3055	b	sxw 1	GEN 3	1422		08-Jun	25-Jun	11-Jul	h	46	231

3055	c	sxw 1	GEN 3	696		07-Jun	25-Jun	29-Jun	01-Jul	41	122
3056	a	sxw 1	GEN 3	1272		17-Jun	25-Jun	28-Jun	02-Jul	23.5	81
3056	b	sxw 1	GEN 3	265		07-Jun	25-Jun	27-Jun	h	63	90
3056	c	sxw 1	GEN 3	1203		18-Jun	25-Jun	28-Jun	03-Jul	25	91
3057	a	sxw 1	GEN 3	1384		07-Jun	25-Jun	28-Jun	02-Jul	12	34
3057	b	sxw 1	GEN 3	599		08-Jun	25-Jun	04-Jul	h	37	129
3057	c	sxw 1	GEN 3	1828		08-Jun	25-Jun	27-Jun	03-Jul	39	146
3058	a	sxw 1	GEN 3	1592		08-Jun	25-Jun	04-Jul	h	38	113
3058	b	sxw 1	GEN 3	1745		08-Jun	25-Jun	27-Jun	h	51	65
3058	c	sxw 1	GEN 3	605		08-Jun	25-Jun	27-Jun	h	44	127
3059	a	sxw 1	GEN 3	835		10-Jun	25-Jun	27-Jun	01-Jul	60	169
3059	b	sxw 1	GEN 3	1587		08-Jun	25-Jun	27-Jun	02-Jul	38	92
3059	c	sxw 1	GEN 3	841		08-Jun	25-Jun	27-Jun	03-Jul	55	105
3060	a	sxw 1	GEN 3	1061		08-Jun	25-Jun	27-Jun	03-Jul	38	67
3060	b	sxw 1	GEN 3	1327		08-Jun	25-Jun	27-Jun	03-Jul	30	149
3060	c	sxw 1	GEN 3	1484		08-Jun	25-Jun	27-Jun	h	46.5	126
3061	a	sxw 1	GEN 3	1607		08-Jun	25-Jun	27-Jun	h	44	151
3061	b	sxw 1	GEN 3	1754		08-Jun	25-Jun	30-Jun	03-Jul	38	142
3061	c	sxw 1	GEN 3	351		08-Jun	25-Jun	27-Jun	h	61	188
3062	a	sxw 1	GEN 3	742		08-Jun	25-Jun	02-Jul	03-Jul	48	84
3062	b	sxw 1	GEN 3	141		08-Jun	25-Jun	04-Jul	h	42	86
3062	c	sxw 1	GEN 3	890		08-Jun	25-Jun	27-Jun	h	46	91
3063	a	sxw 1	GEN 3	1846		08-Jun	25-Jun	27-Jun	h	37	127
3063	b	sxw 1	GEN 3	554		08-Jun	25-Jun	27-Jun	h	31	200
3063	c	sxw 1	GEN 3	1296		08-Jun	25-Jun	27-Jun	h	41	131
3064	a	sxw 1	GEN 3	95		08-Jun	25-Jun	27-Jun	03-Jul	41	125
3064	b	sxw 1	GEN 3	774		08-Jun	25-Jun	27-Jun	h	38	136
3064	c	sxw 1	GEN 3	1039		08-Jun	25-Jun	27-Jun	h	40	147
3065	a	sxw 1	GEN 3	1877		10-Jun	25-Jun	30-Jun	03-Jul	41	91
3065	b	sxw 1	GEN 3	1540		08-Jun	25-Jun	27-Jun	h	49	103
3065	c	sxw 1	GEN 3	1579		10-Jun	25-Jun	30-Jun	03-Jul	37	101

3066	a	sxw 1	GEN 3	52		10-Jun	25-Jun	03-Jul	03-Jul	31	67
3066	b	sxw 1	GEN 3	589		10-Jun	25-Jun	28-Jun	02-Jul	30	68
3066	c	sxw 1	GEN 3	396		10-Jun	25-Jun	27-Jun	02-Jul	32	52
3187	a	sxw 1	GEN 3	1089		10-Jun	25-Jun	27-Jun	02-Jul	40.5	119
3187	b	sxw 1	GEN 3	372		10-Jun	25-Jun	27-Jun	02-Jul	41	123
3187	c	sxw 1	GEN 3	1094		10-Jun	25-Jun	dead	h	25	
3188	a	sxw 1	GEN 3	748		10-Jun	25-Jun	28-Jun	01-Jul	25	5
3188	b	sxw 1	GEN 3	68		08-Jun	25-Jun	27-Jun	h	43	135
3188	c	sxw 1	GEN 3	967		10-Jun	25-Jun	27-Jun	h	30	65
3012	a	sxw 2	GEN 3	2014		10-Jun	25-Jun	27-Jun	h	51	165
3012	b	sxw 2	GEN 3	1137		08-Jun	25-Jun	27-Jun	02-Jul	30	157
3012	c	sxw 2	GEN 3	26		08-Jun	25-Jun	28-Jun	01-Jul	29	146
3013	a	sxw 2	GEN 3	1182		08-Jun	25-Jun	30-Jun	02-Jul	32	128
3013	b	sxw 2	GEN 3	1651		08-Jun	25-Jun	27-Jun	h	40	127
3013	c	sxw 2	GEN 3	1066		08-Jun	25-Jun	28-Jun	02-Jul	30	131
3014	a	sxw 2	GEN 3	1196		dead	25-Jun		h		
3014	b	sxw 2	GEN 3	514		08-Jun	25-Jun	27-Jun	02-Jul	28	10
3014	c	sxw 2	GEN 3	618		08-Jun	25-Jun	27-Jun	h	23	170
3015	a	sxw 2	GEN 3	545		08-Jun	25-Jun	26-Jun	02-Jul	28	55
3015	b	sxw 2	GEN 3	599		10-Jun	25-Jun	28-Jun	01-Jul	32	161
3015	c	sxw 2	GEN 3	2034		08-Jun	25-Jun	28-Jun	03-Jul	44	83
3016	a	sxw 2	GEN 3	200		08-Jun	25-Jun	27-Jun	02-Jul	25	17
3016	b	sxw 2	GEN 3	1290		08-Jun	25-Jun	27-Jun	02-Jul	24	8
3016	c	sxw 2	GEN 3	1320		08-Jun	25-Jun	27-Jun	02-Jul	23	19
3017	a	sxw 2	GEN 3	995		07-Jun	25-Jun	26-Jun	01-Jul	21	8
3017	b	sxw 2	GEN 3	466		07-Jun	25-Jun	28-Jun	02-Jul	25	4
3017	c	sxw 2	GEN 3	806		07-Jun	25-Jun	26-Jun	02-Jul	30	103
3018	a	sxw 2	GEN 3	894		08-Jun	25-Jun	28-Jun	02-Jul	20	32
3018	b	sxw 2	GEN 3	124		10-Jun	25-Jun	27-Jun	02-Jul	29	149
3018	c	sxw 2	GEN 3	1130		08-Jun	25-Jun	04-Jul	03-Jul	29	99
3019	a	sxw 2	GEN 3	85		07-Jun	25-Jun	27-Jun	h	34	138

3019	b	sxw 2	GEN 3	1382	07-Jun	25-Jun	27-Jun	02-Jul	31	96
3019	c	sxw 2	GEN 3	1756	07-Jun	25-Jun	26-Jun	02-Jul	19	98
3020	a	sxw 2	GEN 3	42	07-Jun	25-Jun	27-Jun	02-Jul	29	86
3020	b	sxw 2	GEN 3	1221	07-Jun	25-Jun	26-Jun	02-Jul	30	72
3020	c	sxw 2	GEN 3	366	07-Jun	25-Jun	26-Jun	01-Jul	35	149
3021	a	sxw 2	GEN 3	525	07-Jun	25-Jun	28-Jun	02-Jul	18	204
3021	b	sxw 2	GEN 3	1827	08-Jun	25-Jun	27-Jun	02-Jul	32	41
3021	c	sxw 2	GEN 3	1356	08-Jun	25-Jun	27-Jun	03-Jul	40	132
3022	a	sxw 2	GEN 3	578	08-Jun	25-Jun	27-Jun	03-Jul	44	164
3022	b	sxw 2	GEN 3	2014	08-Jun	25-Jun	28-Jun	03-Jul	21	102
3022	c	sxw 2	GEN 3	714	07-Jun	25-Jun	28-Jun	01-Jul	20	101
3023	a	sxw 2	GEN 3	237	10-Jun	25-Jun	26-Jun	02-Jul	24	25
3023	b	sxw 2	GEN 3	504	10-Jun	25-Jun	28-Jun	02-Jul	23	41
3023	c	sxw 2	GEN 3	1346	07-Jun	25-Jun	28-Jun	02-Jul	68	205
3024	a	sxw 2	GEN 3	791	07-Jun	25-Jun	28-Jun	02-Jul	24	108
3024	b	sxw 2	GEN 3	1865	07-Jun	25-Jun	28-Jun	02-Jul	25.5	111
3024	c	sxw 2	GEN 3	1623	07-Jun	25-Jun	27-Jun	h	35	126
3025	a	sxw 2	GEN 3	1128	07-Jun	25-Jun	26-Jun	01-Jul	30	234
3025	b	sxw 2	GEN 3	1514	07-Jun	25-Jun	25-Jun	01-Jul	28	145
3025	c	sxw 2	GEN 3	1670	07-Jun	25-Jun	27-Jun	01-Jul	65	180
3026	a	sxw 2	GEN 3	1928	07-Jun	25-Jun	27-Jun	01-Jul	52	205
3026	b	sxw 2	GEN 3	1086	07-Jun	25-Jun	28-Jun	01-Jul	29	158
3026	c	sxw 2	GEN 3	1387	07-Jun	25-Jun	26-Jun	03-Jul	24.5	26
3027	a	sxw 2	GEN 3	1393	10-Jun	25-Jun	27-Jun	02-Jul	26	30
3027	b	sxw 2	GEN 3	1178	07-Jun	25-Jun	27-Jun	02-Jul	30	82
3027	c	sxw 2	GEN 3	221	08-Jun	25-Jun	27-Jun	02-Jul	31	7
3028	a	sxw 2	GEN 3	267	07-Jun	25-Jun	27-Jun	01-Jul	65	99
3028	b	sxw 2	GEN 3	1954	07-Jun	25-Jun	27-Jun	01-Jul	64	229
3028	c	sxw 2	GEN 3	967	07-Jun	25-Jun	28-Jun	h	48	205
3029	a	sxw 2	GEN 3	791	08-Jun	25-Jun	27-Jun	01-Jul	56	231
3029	b	sxw 2	GEN 3	1487	08-Jun	25-Jun	27-Jun	01-Jul	55	131

3029	c	sxw 2	GEN 3	1326		08-Jun	25-Jun	27-Jun	01-Jul	50	164
3030	a	sxw 2	GEN 3	974		08-Jun	25-Jun	27-Jun	03-Jul	38	71
3030	b	sxw 2	GEN 3	2049		07-Jun	25-Jun	27-Jun	02-Jul	25	15
3030	c	sxw 2	GEN 3	1571		07-Jun	25-Jun	27-Jun	02-Jul	23	21
3031	a	sxw 2	GEN 3	419		10-Jun	25-Jun	28-Jun	h	38	110
3031	b	sxw 2	GEN 3	527		10-Jun	25-Jun	02-Jul	h	39	77
3031	c	sxw 2	GEN 3	1085		10-Jun	25-Jun	27-Jun	h	37	82
3032	a	sxw 2	GEN 3	1473		08-Jun	25-Jun	28-Jun	01-Jul	50	148
3032	b	sxw 2	GEN 3	901		07-Jun	25-Jun	27-Jun	03-Jul	30	108
3032	c	sxw 2	GEN 3	523		07-Jun	25-Jun	28-Jun	01-Jul	68	152
3033	a	sxw 2	GEN 3	260		10-Jun	25-Jun	28-Jun	02-Jul	17	162
3033	b	sxw 2	GEN 3	1055		10-Jun	25-Jun	28-Jun	03-Jul	29	103
3033	c	sxw 2	GEN 3	2011		10-Jun	25-Jun	02-Jul	03-Jul	34	113
3034	a	sxw 2	GEN 3	1632		10-Jun	25-Jun	27-Jun	03-Jul	30	127
3034	b	sxw 2	GEN 3	134		10-Jun	25-Jun	25-Jun	01-Jul	12	6
3034	c	sxw 2	GEN 3	657		10-Jun	25-Jun	28-Jun	02-Jul	36	171
3035	a	sxw 2	GEN 3	1449		10-Jun	25-Jun	01-Jul	02-Jul	29	101
3035	b	sxw 2	GEN 3	722		10-Jun	25-Jun	30-Jun	02-Jul	30	96
3035	c	sxw 2	GEN 3	1173		10-Jun	25-Jun	01-Jul	03-Jul	41	105
3036	a	winter 1	GEN 3	49		10-Jun	25-Jun	30-Jun	h	35	95
3036	b	winter 1	GEN 3	886		10-Jun	25-Jun	27-Jun	03-Jul	36	96
3036	c	winter 1	GEN 3	265		10-Jun	25-Jun	27-Jun	03-Jul	36	98
3037	a	winter 1	GEN 3	1951		10-Jun	25-Jun	27-Jun	03-Jul	36	161
3037	b	winter 1	GEN 3	1477		10-Jun	25-Jun	27-Jun	03-Jul	34	132
3037	c	winter 1	GEN 3	1121		10-Jun	25-Jun	27-Jun	03-Jul	38	116
3038	a	winter 1	GEN 3	1796		08-Jun	25-Jun	29-Jun	03-Jul	35	118
3038	b	winter 1	GEN 3	248		08-Jun	25-Jun	02-Jul	03-Jul	37	158
3038	c	winter 1	GEN 3	182		08-Jun	25-Jun	04-Jul	03-Jul	30	58
3039	a	winter 1	GEN 3	742		10-Jun	25-Jun	29-Jun	03-Jul	42	53
3039	b	winter 1	GEN 3	1895		10-Jun	25-Jun	29-Jun	03-Jul	41	131
3039	c	winter 1	GEN 3	666		10-Jun	25-Jun	29-Jun	03-Jul	41	132

3040	a	winter 1	GEN 3	934	08-Jun	25-Jun	29-Jun	03-Jul	40	103
3040	b	winter 1	GEN 3	87	08-Jun	25-Jun	30-Jun	03-Jul	40	112
3040	c	winter 1	GEN 3	1498	08-Jun	25-Jun	30-Jun	03-Jul	29	101
3041	a	winter 1	GEN 3	522	10-Jun	25-Jun	29-Jun	h	44	169
3041	b	winter 1	GEN 3	1744	10-Jun	25-Jun	30-Jun	h	40	142
3041	c	winter 1	GEN 3	359	10-Jun	25-Jun	28-Jun	h	38	156
3042	a	winter 1	GEN 3	458	10-Jun	25-Jun	29-Jun	h	39	170
3042	b	winter 1	GEN 3	231	08-Jun	25-Jun	28-Jun	03-Jul	25	100
3042	c	winter 1	GEN 3	793	10-Jun	25-Jun	29-Jun	01-Jul	70	217
3043	a	winter 1	GEN 3	418	10-Jun	25-Jun	29-Jun	h	36	128
3043	b	winter 1	GEN 3	1836	10-Jun	25-Jun	28-Jun	03-Jul	36	134
3043	c	winter 1	GEN 3	1449	10-Jun	25-Jun	29-Jun	h	37	125
3044	a	winter 1	GEN 3	654	10-Jun	25-Jun	04-Jul	h	38	129
3044	b	winter 1	GEN 3	958	10-Jun	25-Jun	01-Jul		46	137
3044	c	winter 1	GEN 3	910	10-Jun	25-Jun	02-Jul	03-Jul	35	128
3140	a	winter 1	GEN 3	269	10-Jun	25-Jun	29-Jun	h	36	238
3140	b	winter 1	GEN 3	1074	10-Jun	25-Jun	04-Jul	h	49	158
3140	c	winter 1	GEN 3	1778	10-Jun	25-Jun	29-Jun	h	52	141
3141	a	winter 1	GEN 3	1190	10-Jun	25-Jun	02-Jul	h	51	102
3141	b	winter 1	GEN 3	1834	10-Jun	25-Jun	30-Jun	h	50	113
3141	c	winter 1	GEN 3	2005	10-Jun	25-Jun	30-Jun	h	46	228
3153	a	winter 1	GEN 3	69	ng	25-Jun				
3153	b	winter 1	GEN 3	146	10-Jun	25-Jun	30-Jun	h	38	91
3153	c	winter 1	GEN 3	359	10-Jun	25-Jun	30-Jun	h	40	102
3081	a	winter 2	GEN 3	444	10-Jun	25-Jun	30-Jun	h	50	128
3081	b	winter 2	GEN 3	1568	10-Jun	25-Jun	30-Jun	h	49	179
3081	c	winter 2	GEN 3	897	10-Jun	25-Jun	30-Jun	h	48	92
3082	a	winter 2	GEN 3	811	ng	25-Jun				
3082	b	winter 2	GEN 3	302	10-Jun	25-Jun	29-Jun	03-Jul	19.5	27
3082	c	winter 2	GEN 3	1664	10-Jun	25-Jun	29-Jun	h	48	49
3083	a	winter 2	GEN 3	1364	ng	25-Jun				

3083	b	winter 2	GEN 3	1355	10-Jun	25-Jun	29-Jun	h	45	149
3083	c	winter 2	GEN 3	505	ng	25-Jun				
3084	a	winter 2	GEN 3	1989	ng	25-Jun				
3084	b	winter 2	GEN 3	1921	10-Jun	25-Jun	29-Jun	h	44	246
3084	c	winter 2	GEN 3	681	10-Jun	25-Jun	29-Jun	h	41	165
3085	a	winter 2	GEN 3	570	ng	25-Jun				
3085	b	winter 2	GEN 3	40	ng	25-Jun				
3085	c	winter 2	GEN 3	597	ng	25-Jun				
3086	a	winter 2	GEN 3	1215	10-Jun	25-Jun	29-Jun	h	44	198
3086	b	winter 2	GEN 3	1304	10-Jun	25-Jun	29-Jun	h	46	172
3086	c	winter 2	GEN 3	1281	10-Jun	25-Jun	29-Jun	h	47	178
3087	a	winter 2	GEN 3	496	10-Jun	25-Jun	29-Jun	h	37	193
3087	b	winter 2	GEN 3	846	10-Jun	25-Jun	29-Jun	h	38	182
3087	c	winter 2	GEN 3	263	10-Jun	25-Jun	29-Jun	h	39	197
3088	a	winter 2	GEN 3	1967	10-Jun	25-Jun	29-Jun	h	23	5
3088	b	winter 2	GEN 3	266	10-Jun	25-Jun	29-Jun	h	34	182
3088	c	winter 2	GEN 3	288	ng	25-Jun				
3089	a	winter 2	GEN 3	258	10-Jun	25-Jun	29-Jun	h	55	161
3089	b	winter 2	GEN 3	1266	10-Jun	25-Jun	29-Jun	h	45	103
3089	c	winter 2	GEN 3	949	10-Jun	25-Jun	29-Jun	h	52	42
3090	a	winter 2	GEN 3	225	ng	25-Jun				
3090	b	winter 2	GEN 3	1955	ng	25-Jun				
3090	c	winter 2	GEN 3	698	10-Jun	25-Jun	29-Jun	h	45	163
3091	a	winter 2	GEN 3	992	10-Jun	25-Jun	29-Jun	h	51	222
3091	b	winter 2	GEN 3	668	ng	25-Jun				
3091	c	winter 2	GEN 3	609	10-Jun	25-Jun	29-Jun	h	64	105
3163	a	winter 2	GEN 3	1651	ng	25-Jun				
3163	b	winter 2	GEN 3	1355	10-Jun	25-Jun	29-Jun	h	51	173
3163	c	winter 2	GEN 3	1043	10-Jun	25-Jun	29-Jun	h	52	158
3164	a	winter 2	GEN 3	570	ng	25-Jun				
3164	b	winter 2	GEN 3	1087	10-Jun	25-Jun	29-Jun	h	29	80

3164	c	winter 2	GEN 3	2031	10-Jun	25-Jun	29-Jun	h	50	108
3165	a	winter 2	GEN 3	2095	10-Jun	25-Jun	08-Jul	h	47	169
3165	b	winter 2	GEN 3	772	10-Jun	25-Jun	29-Jun	h	37	125
3165	c	winter 2	GEN 3	1195	10-Jun	25-Jun	29-Jun	h	64	227
3166	a	winter 2	GEN 3	1403	10-Jun	25-Jun	08-Jul	h	54	196
3166	b	winter 2	GEN 3	1765	10-Jun	25-Jun	29-Jun	h	53	182
3166	c	winter 2	GEN 3	360	10-Jun	25-Jun	29-Jun	h	50	216
3167	a	winter 2	GEN 3	1712	10-Jun	25-Jun	29-Jun	h	44	210
3167	b	winter 2	GEN 3	729	10-Jun	25-Jun	29-Jun	h	43	212
3167	c	winter 2	GEN 3	308	10-Jun	25-Jun	28-Jun	h	42	136
3168	a	winter 2	GEN 3	490	10-Jun	25-Jun	29-Jun	h	59	125
3168	b	winter 2	GEN 3	1551	10-Jun	25-Jun	29-Jun	h	52	186
3168	c	winter 2	GEN 3	1000	10-Jun	25-Jun	29-Jun	h	45	107
3206	a	winter 2	GEN 3	5	10-Jun	25-Jun	29-Jun	02-Jul	48	28
3206	b	winter 2	GEN 3	1201	10-Jun	25-Jun	09-Jul	02-Jul	59	74
3206	c	winter 2	GEN 3	699	10-Jun	25-Jun	29-Jun	02-Jul	64	229
3207	a	winter 2	GEN 3	1540	10-Jun	25-Jun	29-Jun	02-Jul	67	209
3207	b	winter 2	GEN 3	156	10-Jun	25-Jun	09-Jul	02-Jul	43	139
3207	c	winter 2	GEN 3	1313	10-Jun	25-Jun	29-Jun	02-Jul	40	111
3208	a	winter 2	GEN 3	1950	10-Jun	25-Jun	29-Jun	02-Jul	36	21
3208	b	winter 2	GEN 3	1620	10-Jun	25-Jun	29-Jun	h	63	132
3208	c	winter 2	GEN 3	1788	10-Jun	25-Jun	29-Jun	02-Jul	63	62
3228	a	winter 2	GEN 3	546	10-Jun	25-Jun	04-Jul	h	34	18
3228	b	winter 2	GEN 3	535	10-Jun	25-Jun	02-Jul	03-Jul	41	58
3228	c	winter 2	GEN 3	825	10-Jun	25-Jun	06-Jul	h	57	61
3229	a	winter 2	GEN 3	1390	10-Jun	25-Jun	29-Jun	h	25	232
3229	b	winter 2	GEN 3	1764	10-Jun	25-Jun	29-Jun	h	56	150
3229	c	winter 2	GEN 3	737	ng	25-Jun				
3233	a	winter 2	GEN 3	1653	10-Jun	25-Jun	29-Jun	h	36	171
3233	b	winter 2	GEN 3	437	10-Jun	25-Jun	29-Jun	h	58	101
3233	c	winter 2	GEN 3	467	10-Jun	25-Jun	29-Jun	h	60	140

3234	a	winter 2	GEN 3	2026		10-Jun	25-Jun	29-Jun	h	68	184
3234	b	winter 2	GEN 3	773		10-Jun	25-Jun	29-Jun	h	51	150
3234	c	winter 2	GEN 3	1231		10-Jun	25-Jun	29-Jun	h	59	101
3128	a	wxw 1	GEN 3	646		10-Jun	25-Jun	29-Jun	03-Jul	39	70
3128	b	wxw 1	GEN 3	25		ng	25-Jun				
3128	c	wxw 1	GEN 3	1888		10-Jun	25-Jun	29-Jun	03-Jul	39	47
3129	a	wxw 1	GEN 3	720		25-Jun	25-Jun	01-Jul	02-Jul	30	80
3129	b	wxw 1	GEN 3	834		ng	25-Jun				
3129	c	wxw 1	GEN 3	25		ng	25-Jun				
3130	a	wxw 1	GEN 3	116		10-Jun	25-Jun	29-Jun	h	56	106
3130	b	wxw 1	GEN 3	1497		ng	25-Jun				
3130	c	wxw 1	GEN 3	43		10-Jun	25-Jun	29-Jun	h	64	211
3131	a	wxw 1	GEN 3	1843		10-Jun	25-Jun	29-Jun	h	44	228
3131	b	wxw 1	GEN 3	470		10-Jun	25-Jun	29-Jun	h	23	197
3131	c	wxw 1	GEN 3	1954		10-Jun	25-Jun	29-Jun	h	67	120
3132	a	wxw 1	GEN 3	1001		10-Jun	25-Jun	28-Jun	02-Jul	35	11
3132	b	wxw 1	GEN 3	333		07-Jun	25-Jun	28-Jun	01-Jul	67	159
3132	c	wxw 1	GEN 3	66		07-Jun	25-Jun	28-Jun	01-Jul	53	160
3133	a	wxw 1	GEN 3	843		10-Jun	25-Jun	29-Jun	02-Jul	18	4
3133	b	wxw 1	GEN 3	103		10-Jun	25-Jun	29-Jun	03-Jul	29	15
3133	c	wxw 1	GEN 3	1666		10-Jun	25-Jun	29-Jun	02-Jul	29	10
3134	a	wxw 1	GEN 3	395		10-Jun	25-Jun	29-Jun	03-Jul	49	77
3134	b	wxw 1	GEN 3	1565		08-Jun	25-Jun	29-Jun	02-Jul	48	43
3134	c	wxw 1	GEN 3	1324		08-Jun	25-Jun	29-Jun	03-Jul	30	44
3135	a	wxw 1	GEN 3	1135		10-Jun	25-Jun	30-Jun	02-Jul	15	5
3135	b	wxw 1	GEN 3	157		10-Jun	25-Jun	29-Jun	h	67	123
3135	c	wxw 1	GEN 3	1621		10-Jun	25-Jun	02-Jul	03-Jul	26	2
3136	a	wxw 1	GEN 3	1239		10-Jun	25-Jun	30-Jun	03-Jul	36	148
3136	b	wxw 1	GEN 3	303		10-Jun	25-Jun	29-Jun	h	40	150
3136	c	wxw 1	GEN 3	384		10-Jun	25-Jun	30-Jun	03-Jul	37	137
3137	a	wxw 1	GEN 3	1037		10-Jun	25-Jun	01-Jul	h	35	152

3137	b	wxw 1	GEN 3	518		10-Jun	25-Jun	30-Jun	03-Jul	35	129
3137	c	wxw 1	GEN 3	596		10-Jun	25-Jun	29-Jun	h	40	143
3138	a	wxw 1	GEN 3	850		10-Jun	25-Jun	29-Jun	h	38	82
3138	b	wxw 1	GEN 3	1010		10-Jun	25-Jun	29-Jun	h	64	198
3138	c	wxw 1	GEN 3	1490		10-Jun	25-Jun	04-Jul	02-Jul	50	75
3139	a	wxw 1	GEN 3	1206		10-Jun	25-Jun	30-Jun	02-Jul	20	10
3139	b	wxw 1	GEN 3	777		10-Jun	25-Jun	30-Jun	h	28	12
3139	c	wxw 1	GEN 3	1691		10-Jun	25-Jun	29-Jun	h	50	50
3180	a	wxw 1	GEN 3	320		10-Jun	25-Jun	29-Jun	h	43	136
3180	b	wxw 1	GEN 3	1671		10-Jun	25-Jun	01-Jul	h	36	130
3180	c	wxw 1	GEN 3	391		10-Jun	25-Jun	03-Jul	03-Jul	30	137
3181	a	wxw 1	GEN 3	2008		10-Jun	25-Jun	06-Jul	h	46.5	143
3181	b	wxw 1	GEN 3	358		10-Jun	25-Jun	02-Jul	03-Jul	26	13
3181	c	wxw 1	GEN 3	2020		10-Jun	25-Jun	29-Jun	h	60	21
3182	a	wxw 1	GEN 3	603		10-Jun	25-Jun	29-Jun	h	46	138
3182	b	wxw 1	GEN 3	56		10-Jun	25-Jun	29-Jun	h	33	46
3182	c	wxw 1	GEN 3	1334		10-Jun	25-Jun	29-Jun	h	47	52
3183	a	wxw 1	GEN 3	2048		10-Jun	25-Jun	29-Jun	h	46	143
3183	b	wxw 1	GEN 3	1652		10-Jun	25-Jun	28-Jun	03-Jul	38	102
3183	c	wxw 1	GEN 3	1836		10-Jun	25-Jun	29-Jun	h	44.5	56
3184	a	wxw 1	GEN 3	1152		10-Jun	25-Jun	29-Jun	03-Jul	32	73
3184	b	wxw 1	GEN 3	1627		10-Jun	25-Jun	29-Jun	h	38	72
3184	c	wxw 1	GEN 3	1120		10-Jun	25-Jun	29-Jun	h	53	123
3185	a	wxw 1	GEN 3	1992		10-Jun	25-Jun	29-Jun	h	60	53
3185	b	wxw 1	GEN 3	721		10-Jun	25-Jun	04-Jul	h	37	52
3185	c	wxw 1	GEN 3	1629		10-Jun	25-Jun	29-Jun	h	50	209
3186	a	wxw 1	GEN 3	1610		10-Jun	25-Jun	01-Jul	03-Jul	33	138
3186	b	wxw 1	GEN 3	1451		ng	25-Jun				
3186	c	wxw 1	GEN 3	1063		ng	25-Jun				
3209	a	wxw 1	GEN 3	2050		10-Jun	25-Jun	30-Jun	02-Jul	26	61
3209	b	wxw 1	GEN 3	991		10-Jun	25-Jun	29-Jun	h	45	65

3209	c	wxw 1	GEN 3	1757		10-Jun	25-Jun	04-Jul	h	45	71
3210	a	wxw 1	GEN 3	1197		10-Jun	25-Jun	29-Jun	01-Jul	59	212
3210	b	wxw 1	GEN 3	500		10-Jun	25-Jun	29-Jun	03-Jul	42	92
3210	c	wxw 1	GEN 3	309		10-Jun	25-Jun	29-Jun	03-Jul	54	109
3218	a	wxw 1	GEN 3	1384		10-Jun	25-Jun	29-Jun	03-Jul	40	117
3218	b	wxw 1	GEN 3	566		10-Jun	25-Jun	29-Jun	h	41	121
3218	c	wxw 1	GEN 3	1197		10-Jun	25-Jun	29-Jun	03-Jul	42	132
3219	a	wxw 1	GEN 3	1652		10-Jun	25-Jun	29-Jun	h	52	216
3219	b	wxw 1	GEN 3	120		10-Jun	25-Jun	29-Jun	h	46	146
3219	c	wxw 1	GEN 3	757		10-Jun	25-Jun	03-Jul	h	48	138
3225	a	wxw 1	GEN 3	146		10-Jun	25-Jun	29-Jun	h	54	137
3225	b	wxw 1	GEN 3	1650		10-Jun	25-Jun	29-Jun	h	45	86
3225	c	wxw 1	GEN 3	1928		10-Jun	25-Jun	29-Jun	h	51	91
3226	a	wxw 1	GEN 3	1567		10-Jun	25-Jun	27-Jun	02-Jul	21	22
3226	b	wxw 1	GEN 3	1865		10-Jun	25-Jun	28-Jun	03-Jul	40	81
3226	c	wxw 1	GEN 3	1572		10-Jun	25-Jun	28-Jun	h	45	96
3071	a	wxw 2	GEN 3	1295		07-Jun	25-Jun	25-Jun	03-Jul	29	94
3071	b	wxw 2	GEN 3	608		07-Jun	25-Jun	29-Jun	03-Jul	48	100
3071	c	wxw 2	GEN 3	484		07-Jun	25-Jun	28-Jun	03-Jul	42	85
3072	a	wxw 2	GEN 3	1909		07-Jun	25-Jun	29-Jun	02-Jul	36	40
3072	b	wxw 2	GEN 3	554		07-Jun	25-Jun	27-Jun	02-Jul	3	50
3072	c	wxw 2	GEN 3	1498		07-Jun	25-Jun	27-Jun	03-Jul	31	75
3073	a	wxw 2	GEN 3	149		07-Jun	25-Jun	26-Jun	02-Jul	58	212
3073	b	wxw 2	GEN 3	454		07-Jun	25-Jun	01-Jul	h	20	19
3073	c	wxw 2	GEN 3	327		07-Jun	25-Jun	27-Jun	02-Jul	19	26
3074	a	wxw 2	GEN 3	1579		10-Jun	25-Jun	26-Jun	01-Jul	30	118
3074	b	wxw 2	GEN 3	275		10-Jun	25-Jun	01-Jul	03-Jul	36	113
3074	c	wxw 2	GEN 3	1219		10-Jun	25-Jun	26-Jun	h	42	120
3075	a	wxw 2	GEN 3	1771		10-Jun	25-Jun	27-Jun	03-Jul	31	91
3075	b	wxw 2	GEN 3	1263		10-Jun	25-Jun	27-Jun	02-Jul	25	95
3075	c	wxw 2	GEN 3	268		10-Jun	25-Jun	27-Jun	02-Jul	35	113

3076	a	wxw 2	GEN 3	1520		07-Jun	25-Jun	27-Jun	01-Jul	46	110
3076	b	wxw 2	GEN 3	1912		07-Jun	25-Jun	30-Jun	03-Jul	40	48
3076	c	wxw 2	GEN 3	409		07-Jun	25-Jun	30-Jun	03-Jul	40	45
3077	a	wxw 2	GEN 3	704		10-Jun	25-Jun	01-Jul	03-Jul	38	59
3077	b	wxw 2	GEN 3	334		10-Jun	25-Jun	30-Jun	03-Jul	38	160
3077	c	wxw 2	GEN 3	61		10-Jun	25-Jun	01-Jul	03-Jul	31	47
3078	a	wxw 2	GEN 3	764		07-Jun	25-Jun	01-Jul	03-Jul	28	47
3078	b	wxw 2	GEN 3	554		07-Jun	25-Jun	01-Jul	03-Jul	42	46
3078	c	wxw 2	GEN 3	1334		07-Jun	25-Jun	27-Jun	h	36	120
3079	a	wxw 2	GEN 3	269		10-Jun	25-Jun	01-Jul	03-Jul	35	115
3079	b	wxw 2	GEN 3	1751		10-Jun	25-Jun	28-Jun	03-Jul	35	99
3079	c	wxw 2	GEN 3	1949		10-Jun	25-Jun	29-Jun	03-Jul	25.5	87
3080	a	wxw 2	GEN 3	1651		10-Jun	25-Jun	01-Jul	03-Jul	26.5	67
3080	b	wxw 2	GEN 3	602		10-Jun	25-Jun	30-Jun	03-Jul	30	53
3080	c	wxw 2	GEN 3	1569		07-Jun	25-Jun	26-Jun	03-Jul	39	54
3092	a	wxw 2	GEN 3	596		10-Jun	25-Jun	27-Jun	02-Jul	30	71
3092	b	wxw 2	GEN 3	876		10-Jun	25-Jun	27-Jun	03-Jul	40.5	55
3092	c	wxw 2	GEN 3	499		07-Jun	25-Jun	27-Jun	h	37	56
3093	a	wxw 2	GEN 3	872		07-Jun	25-Jun	26-Jun	01-Jul	47	109
3093	b	wxw 2	GEN 3	670		07-Jun	25-Jun	27-Jun	01-Jul	40	194
3093	c	wxw 2	GEN 3	1641		07-Jun	25-Jun	27-Jun	02-Jul	38	150
3094	a	wxw 2	GEN 3	216		07-Jun	25-Jun	01-Jul	03-Jul	27	3
3094	b	wxw 2	GEN 3	123		07-Jun	25-Jun	28-Jun	03-Jul	34	5
3094	c	wxw 2	GEN 3	440		07-Jun	25-Jun	27-Jun	01-Jul	43	211
3095	a	wxw 2	GEN 3	1790		07-Jun	25-Jun	28-Jun	03-Jul	42	185
3095	b	wxw 2	GEN 3	501		07-Jun	25-Jun	28-Jun	03-Jul	36	132
3095	c	wxw 2	GEN 3	496		07-Jun	25-Jun	28-Jun	03-Jul	38	133
3096	a	wxw 2	GEN 3	172		07-Jun	25-Jun	30-Jun	03-Jul	34	15
3096	b	wxw 2	GEN 3	311		07-Jun	25-Jun	01-Jul	03-Jul	19	10
3096	c	wxw 2	GEN 3	304		07-Jun	25-Jun	30-Jun	02-Jul	32	14
3176	a	wxw 2	GEN 3	108		10-Jun	25-Jun	30-Jun	h	39	115

3176	b	wxw 2	GEN 3	952	07-Jun	25-Jun	30-Jun	03-Jul	22	12
3176	c	wxw 2	GEN 3	1263	11-Jun	25-Jun	03-Jul	h	35	72
3177	a	wxw 2	GEN 3	657	10-Jun	25-Jun	01-Jul	03-Jul	36	43
3177	b	wxw 2	GEN 3	192	10-Jun	25-Jun	01-Jul	03-Jul	31	50
3177	c	wxw 2	GEN 3	1654	10-Jun	25-Jun	02-Jul	03-Jul	33	54
3178	a	wxw 2	GEN 3	72	07-Jun	25-Jun	30-Jun	h	29	71
3178	b	wxw 2	GEN 3	116	07-Jun	25-Jun	30-Jun	h	28	125
3178	c	wxw 2	GEN 3	1239	07-Jun	25-Jun	30-Jun	02-Jul	36	131
3179	a	wxw 2	GEN 3	1367	07-Jun	25-Jun	28-Jun	03-Jul	27	52
3179	b	wxw 2	GEN 3	1330	07-Jun	25-Jun	30-Jun	01-Jul	51	178
3179	c	wxw 2	GEN 3	1778	07-Jun	25-Jun	29-Jun	03-Jul	15	170
3221	a	wxw 2	GEN 3	232	10-Jun	25-Jun	29-Jun	h	36	212
3221	b	wxw 2	GEN 3	109	10-Jun	25-Jun	29-Jun	h	48	146
3221	c	wxw 2	GEN 3	1459	10-Jun	25-Jun	29-Jun	h	24	235
3223	a	wxw 2	GEN 3	14	10-Jun	25-Jun	29-Jun	h	36	141
3223	b	wxw 2	GEN 3	1066	10-Jun	25-Jun	11-Jul	03-Jul	52	150
3223	c	wxw 2	GEN 3	287	10-Jun	25-Jun	10-Jul	h	56	121